

IRAS e-Tax Guide

**GST Guide for the
Biomedical Industry
(Fourth edition)**



**INLAND REVENUE
AUTHORITY
OF SINGAPORE**

Published by
Inland Revenue Authority of Singapore

Published on 1 Mar 2012

First Edition: 1 Sep 2011

Second Edition: 25 Nov 2011

Third Edition: 10 Jan 2012

© Inland Revenue Authority of Singapore

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording without the written permission of the copyright holder, application for which should be addressed to the publisher. Such written permission must also be obtained before any part of this publication is stored in a retrieval system of any nature.

TABLE OF CONTENTS

1	Introduction.....	1
2	Overview of Budget 2011 GST Changes.....	1
3	GST Relief for Importation of Clinical Trials Materials (CTMs).....	1
4	Enhanced Approved Contract Manufacturer and Trader (ACMT) Scheme for Qualifying Biomedical Manufacturers	2
5	GST Treatment for Specific Supplies.....	9
5.1	Taxability of research grants.....	9
5.2	Research and Development Services Supplied to Overseas Customers... 	11
5.3	Research service agreements	11
5.4	Research and clinical trials involving animal or human subjects.....	12
5.5	Research and testing of animal or human specimens or samples	13
5.6	Research involving prototypes	14
6	Input Tax Claims.....	17
6.1	General Rules	17
6.2	Intention to Make Taxable Supplies.....	18
6.3	Input Tax Attributable to Non-Taxable Grants	19
7	Feedback and Contact information.....	20
8	Updates and Amendments	20

1 Introduction

- 1.1 The Biomedical industry is a key growth engine of Singapore's economy and one of the fastest growing sectors. To facilitate growth, IRAS collaborated with the GST Services of the Big 4 CPA Firms to co-design GST solutions to address various issues faced by the industry. Other government agencies have also been consulted.
- 1.2 The Minister for Finance announced the new GST measures designed to ease GST compliance for the industry in his 2011 Budget Statement.
- 1.3 This guide explains the 2011 Budget GST changes for the biomedical industry.
- 1.4 This guide also clarifies the GST treatment for other common scenarios and issues in the biomedical industry based on existing GST rules.

2 Overview of Budget 2011 GST Changes

- 2.1 At a glance, the 2011 Budget changes for the biomedical industry provide for the following:
- (a) GST relief on importation of clinical trial materials (CTMs) into Singapore; and
 - (b) Extending the enhanced Approved Contract Manufacturer and Trader (ACMT) Scheme to qualifying biomedical contract manufacturers
- 2.2 From 1 Oct 2011 to 31 Dec 2011, these changes were effected by way of Ministerial remission. To give legislative effect to these changes, the following amendments to the GST Act and its subsidiary legislation have been made with effect from 1 Jan 2012,

GST Change	Supporting Legislation
GST relief on importation of clinical trial materials (CTMs)	GST (Import Relief) Order
Enhancements to the Approved Contract Manufacturer and Trader (ACMT) scheme	Section 37A of the GST Act and Regulation 46 of the GST (General) Regulations

- 2.3 The following paragraphs explain the changes in detail.

3 GST Relief for Importation of Clinical Trials Materials (CTMs)

- 3.1 Generally, all goods imported into Singapore are subject to GST. GST-registered persons are entitled to claim the import GST incurred on the goods if they satisfy the conditions for claiming input tax under sections 19 and 20 of the GST Act.

- 3.2 Local intermediaries (such as logistics companies or research organizations) may be engaged by overseas pharmaceutical or biotechnical companies (hereafter referred to as 'overseas sponsors') to import clinical trial materials (CTMs) into Singapore for local clinical trials, re-export or destruction. CTMs refer to "any medicinal products intended for use in clinical trials."

Prior to 1 October 2011

- 3.3 The general rule in paragraph 3.1 also applies to all imports of CTMs into Singapore. As a consequence, a local intermediary may face certain limitations in claiming the import GST it incurs on importing CTMs belonging to its overseas sponsors.
- 3.4 Prior to 1 October 2011, the local intermediary would not be entitled to recover the GST incurred to import CTMs for local clinical trials as there is no subsequent supply of the CTMs. Neither would it be able to use its approved status under any of the specialised schemes with GST suspension, such as the Major Exporter Scheme (MES), to import the CTMs consigned to it. For CTMs imported for re-export or scrapping, while there are existing means for the import GST to be relieved or claimed, they require the intermediary to identify the purpose of importing the CTMs upfront. In practice, the intermediary may face difficulties doing so as its overseas sponsor may not have given the specific instructions yet at the point of importation.

From 1 October 2011

- 3.5 To support local clinical research and ease business compliance, a new GST relief has been introduced from 1 October 2011 for all CTMs imported into Singapore, so long as they are for local clinical trials, re-export or scrapping. This means that a local intermediary does not need to pay import GST upfront when it imports CTMs for its overseas sponsor, even if it is unable to establish the purpose of the import upfront.
- 3.6 The above GST relief is granted on the basis that CTMs cannot be legally traded or sold and hence, are not for private consumption.
- 3.7 For details on the qualifying conditions for the relief and the import procedures, please refer to Singapore Customs' circular "GOODS AND SERVICES TAX RELIEF FOR IMPORT OF CLINICAL TRIAL MATERIALS" (Circular 20/2011) available on www.customs.gov.sg.

4 Enhanced Approved Contract Manufacturer and Trader (ACMT) Scheme for Qualifying Biomedical Manufacturers

- 4.1 Contract manufacturing is an adopted business model in the biomedical industry, whereby an overseas pharmaceutical or biologics company consigns raw materials to a local contract manufacturer (hereafter referred to as "CM") for value-added activities and pays a service fee.

4.2 The following diagram illustrates a typical contract manufacturing arrangement in the biomedical industry.

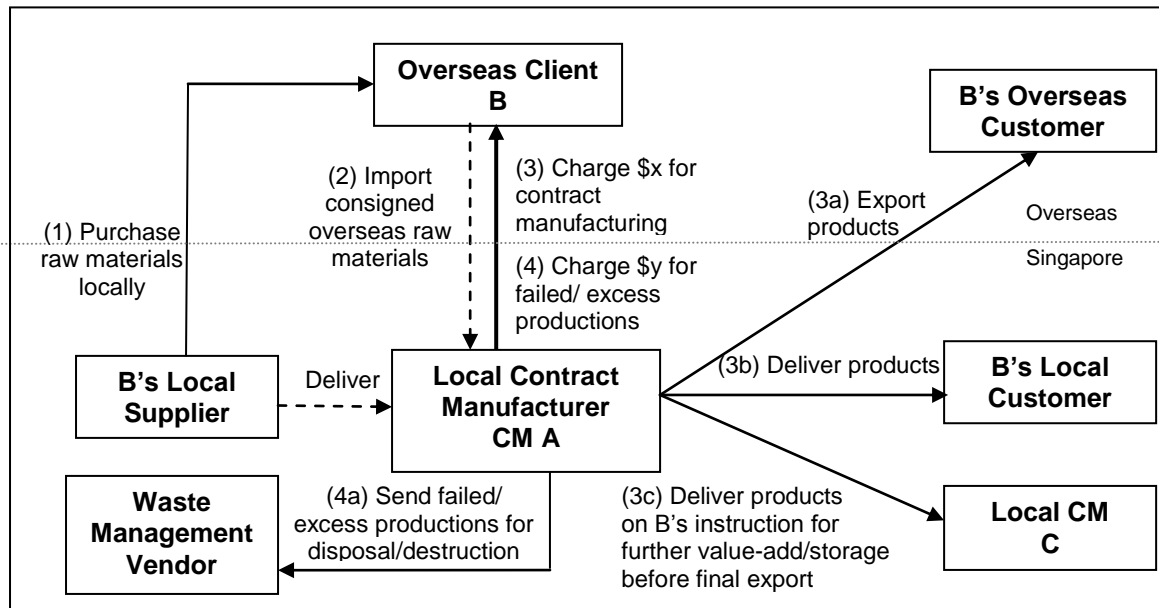


Fig 1. A typical contract manufacturing arrangement in the biomedical industry

Prior to 1 October 2011

4.3 Based on current rules, the GST implications for a local GST-registered contract manufacturer (i.e. CM A in the above diagram) and its overseas clients are as follows:

Implications of the CM's supplies to its overseas client

- (a) The CM needs to account for GST on any value-added services supplied to its overseas client, where the services relate to treating or processing goods that are delivered locally to the overseas client's customer or any other parties for further value-add services or storage before the final export¹. In this instance, the CM's value-added services are standard-rated as they are performed directly in connection with goods in Singapore.

The CM can only zero-rate its value-added services to the overseas client, where the services relate to treating or processing goods that are exported out of Singapore, subject to satisfying the requirements for zero-rating under the e-Tax guide 'A GST Guide on Exports'. The CM will also need to maintain the documents required under the e-Tax guide.

¹ In line with Paragraph 2 of the Second Schedule to the GST Act, where a CM produces goods by applying a treatment or process to his overseas client's goods, the CM is treated as making a supply of goods for GST purposes. Accordingly whether the CM's supply to his overseas client qualifies for zero-rating is dependent on the GST rules on export of goods.

- (b) Similarly, the CM needs to account for GST on the value-added services supplied to the overseas client relating to failed or excess productions subsequently destroyed or disposed locally. This is if the CM is charging a separate fee for it to the overseas client, in addition to its primary contract manufacturing service fee.

Similar to (a), the CM can zero-rate its services only if it can prove with documentation that the failed or excess productions are exported.

Implications for input tax entitlements

- (c) The CM cannot claim input tax on import GST incurred on importation of its overseas client's goods (including raw materials) although the goods are consigned to it for the purpose of performing the value-added services. This is because the goods belong to the overseas client and not the CM.
- (d) The CM cannot claim the GST incurred on goods (including raw materials) locally-purchased by the overseas client from GST-registered suppliers and consigned to it for the purpose of performing the value-added services. This is because the purchases are contractually made by the overseas client and not the CM.
- (e) There may also be situations where, instead of the overseas client, it is agreed that the CM purchases the goods (including raw materials) from local suppliers. The CM will subsequently recover the cost of the purchases and transfer title of the goods to the overseas client (since all goods belong to the overseas client under the contract manufacturing model). In such instances, the CM is treated as making a supply of the goods to the overseas client since there is title transfer and consideration received. Where the goods remain in Singapore for the value-added services, the CM must charge its overseas client GST on the supply of the goods.

4.4 Hence prior to 1 October 2011, the above GST costs would have to be borne either by the overseas client or by the CM if the latter chooses to absorb them. If the overseas client bears the cost, it can only recover them provided it is eligible for GST registration in Singapore. Otherwise, the overseas client cannot recover the GST costs it incurs under such contract manufacturing arrangements.

4.5 To be eligible for GST registration, the overseas client must make –

- taxable supplies in Singapore; or
- out-of-scope supplies that would be taxable if made in Singapore, provided it has a business establishment in Singapore.

From 1 October 2011

- 4.6 Given that contract manufacturing business models in the Biomedical industry are compatible with the design of the Approved Contract Manufacturer and Trader (ACMT) scheme, the ACMT scheme has been extended to qualifying biomedical contract manufacturers from 1 October 2011.
- 4.7 As a start, “qualifying biomedical contract manufacturers” refers to contract manufacturers of Active Pharmaceutical Ingredients (APIs). Nevertheless, the Comptroller is prepared to consider contract manufacturers in other business segments in the biomedical industry on a case-by-case basis, if their business model fits into the ACMT scheme and they are able to satisfy all other eligibility conditions.

Benefits of the scheme

- 4.8 The ACMT scheme is designed to relieve the GST costs incurred by the overseas clients and/or local CMs (if the CMs choose to absorb the GST instead).
- 4.9 As a contract manufacturer approved under the enhanced ACMT scheme (hereafter referred to as “ACMT CM”), an ACMT CM will enjoy the following benefits.

Supply of value-added services disregarded

- (a) An ACMT CM can disregard the supply of value-added services to its overseas client, where it relates to treating or processing goods that are:
- exported, provided that the ACMT CM maintains the relevant documents set out under the e-Tax guide ‘A GST Guide on Exports’; or
 - delivered locally to its overseas client’s final customer; or
 - delivered locally to another ACMT CM or an ACMT LOG; or

Consequently, the fee charged by the ACMT CM to its overseas client for the value added services is not subject to GST.

Value added services under the ACMT scheme include processing, assembly, Quality Control (QC) and functional testing. This applies to consignment, modified turnkey and full turnkey arrangements.

For the treated or processed goods delivered locally to its overseas client’s final customer, the ACMT CM must charge and account GST for the goods based on the actual sales value of its overseas client’s supply to its final customer.

(b) The ACMT CM can also disregard the supply of value-added services to its overseas client relating to failed or excess productions. Consequently, the separate fee if any, charged by the ACMT CM to its overseas client for the value added services relating to such failed or excess productions, is not subject to GST. This is provided that the goods are subsequently:

- exported, provided that the ACMT CM maintains the relevant documents required under the e-Tax guide 'A GST Guide on Exports'; or
- disposed or destroyed locally with no consideration. In such instances, the goods must be delivered directly to or through an ACMT LOG to, a waste management vendor for destruction or disposal.

The ACMT CM may also self-destroy or self-dispose the failed or excess productions. The Comptroller recognizes that in such instances, practices and supporting documents maintained may vary across businesses. Consequently, the ACMT CM should seek the Comptroller's prior confirmation that it can disregard its supply of value added services relating to such goods. The ACMT CM should provide details of the self-destruction or self-disposal process and supporting documentation it will maintain to prove that the goods were destroyed or disposed.

Such failed or excess productions must arise out of the ACMT CM's overall supply of value added services to its overseas client and are inherent in the process, despite the fact that they may be separately priced. This means that the ACMT CM is providing value added services to its overseas client, following which the treated or processed goods are found to be:

- Failed productions of an unsatisfactory standard or quality; or
- Excess productions in excess of the amount of treated or processed goods required by the overseas client

Where the failed or excess productions are instead sold or disposed locally with consideration, the ACMT CM needs to account for GST on the consideration received on behalf of the overseas client.

Although the supplies of value added activities to its overseas clients are treated as outside the scope of GST under the ACMT Scheme, an ACMT CM is still entitled to claim input tax credit attributable to making such supplies to the overseas clients subject to the normal input tax claim conditions².

² Sections 19 and 20 of the GST Act

Import GST suspension on overseas goods

- (c) An ACMT CM may import, with GST suspended, overseas goods (including raw materials) belonging to its overseas client and consigned to it for the purpose of performing value added services under the ACMT scheme.

In addition, an ACMT CM may also enjoy import GST suspension on the importation of its own goods and goods belonging to its overseas principals for whom it is acting as an agent either under Section 33(2) or Section 33A³.

Input tax entitlement on local purchases of goods by your overseas client

- (d) An ACMT CM may claim GST incurred on goods locally purchased by its overseas client from GST-registered suppliers and delivered to the it on which value added services are performed under the ACMT scheme. These locally-purchased goods such as raw materials should become inputs to the goods treated or processed by the ACMT CM. The claim shall be made on behalf of its overseas client as if it is the own input tax of the ACMT CM, in the accounting period relating to the date of tax invoice issued by the supplier.

The above input tax claim is allowed on the condition that the ACMT CM bears the GST amount on the local purchases. This must be established by:

- (i) the ACMT CM paying the tax to the supplier or;
- (ii) if the overseas client has paid the tax to the supplier, the ACMT CM refunding the tax to the overseas client, either through an outright payment or offset from the ACMT CM's service fee.

Input tax entitlement on any separate supply of goods made by you

- (e) Although an ACMT CM must continue to issue a tax invoice and charge GST on any local supply of goods (including raw materials) it makes to its overseas client, it can also claim the GST charged on the supply as input tax on behalf of the overseas client, in the same manner as that explained in paragraph 4.9(d).

This means that for such situations, the ACMT CM has a dual role as a supplier of goods to its overseas client, and also as an “agent” of client in claiming input tax. First as a GST-registered supplier, it must account

³ Section 33A of the GST Act allows repayment of GST paid on importation to an overseas person through a claim of input tax by a local agent who imports the goods, subject to certain requirements. For an agent who is also an approved AISS person, Regulation 46 of the GST (General) Regulations allows it to suspend the import GST if the same requirements are satisfied. Please refer to the e-tax guide “[GST Guide on Imports](#)” for the details.

for output tax on the supply of the goods (based on time of supply rules) to the overseas client. Subsequently as the recipient of the goods for use in performing the value added services, the ACMT CM can claim the input tax in the accounting period corresponding to the date of its tax invoice to the overseas client.

4.10 The following diagrams illustrate the GST benefits under the ACMT scheme from 1 October 2011.

GST benefits (a) to (d) under enhanced ACMT scheme w.e.f 1 October 2011

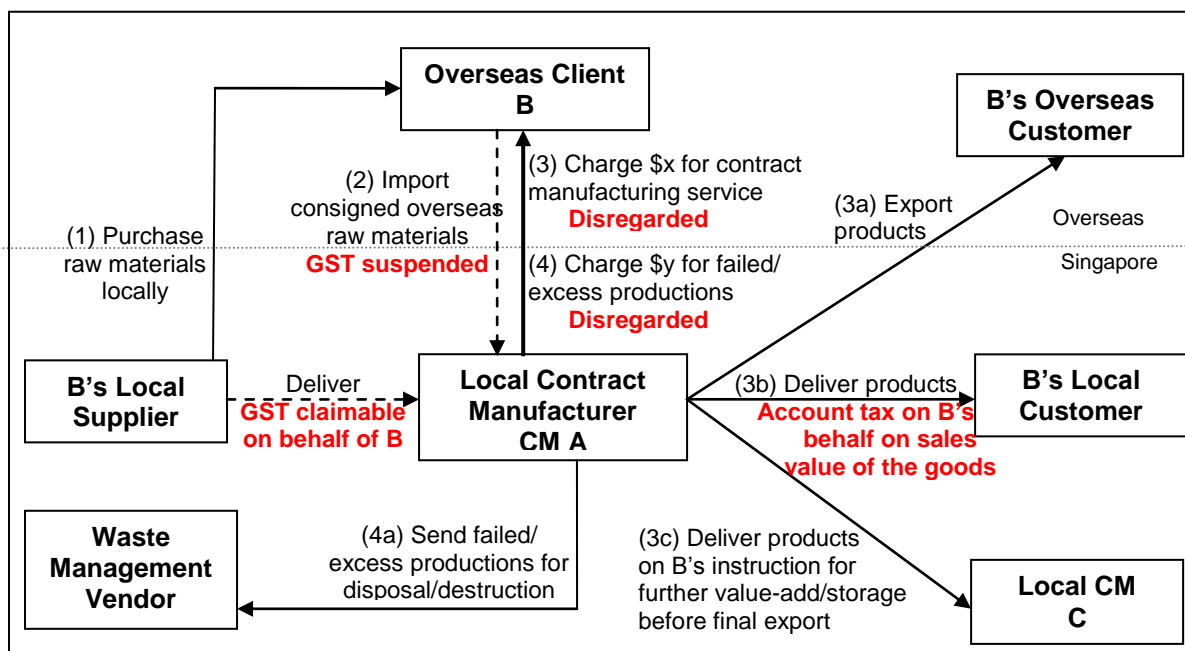


Fig. 2 GST benefits under enhanced ACMT scheme w.e.f. 1 Oct 2011

GST input tax entitlement on any separate supply of raw materials made by ACMT CM w.e.f. 1 October 2011 – Paragraph (e)

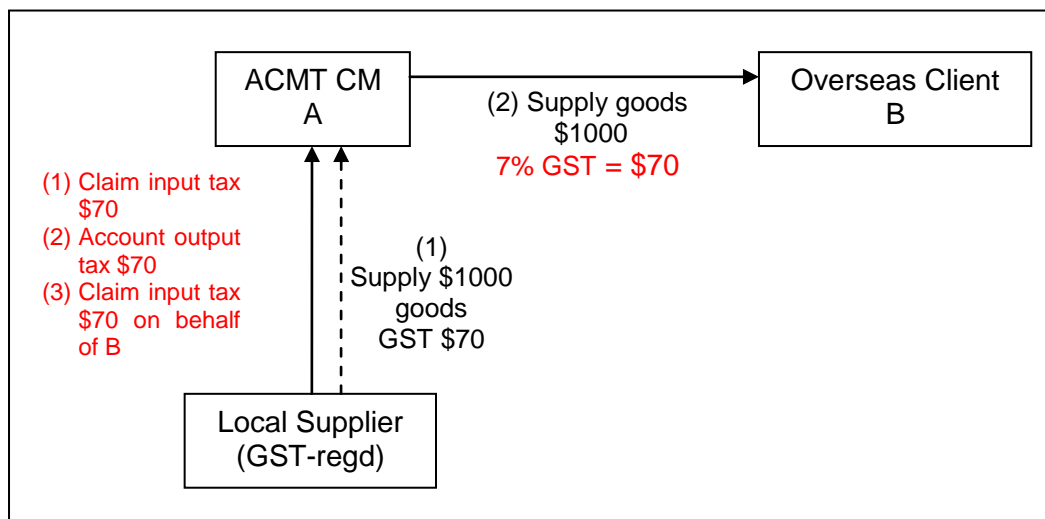


Fig 3. Input tax entitlement on separate supply of raw materials w.e.f. 1 Oct 2011

Eligibility conditions, application process and requirements of the ACMT scheme

- 4.11 Please refer to the e-Tax Guide “Approved Contract Manufacturer and Trader (ACMT) Scheme” for details on the eligibility conditions and application process for the ACMT scheme, as well as the accounting, reporting and documentary requirements for an ACMT CM.

5 GST Treatment for Specific Supplies

5.1 Taxability of research grants

- (a) Research in the biomedical industry may be publicly or privately funded through grants. The following paragraphs explain when such research grants attract GST.

The law

- (b) Section 10(2) of the GST Act defines supply to “include all forms of supply but not anything done otherwise than for a consideration”. Hence for a supply to exist for GST purposes, there must be a direct link between the goods or services supplied and consideration received.

GST treatment for research grants

- (c) Applying the above principle, grants that are **outright payments with no benefit given in return** to the grantor **will not attract GST**. On the other hand, the grant will attract GST if **direct benefits** are conferred to the grantor by the recipient in the form of goods or services, in return for the grant. In such instance, the grant will be treated as consideration for the supply of the goods or services.
- (d) Hence, in any research grant arrangement, the recipient needs to determine the primary purpose of the grant. It needs to account for GST on the grant if it is receiving it in return for giving direct benefits to the grantor, such as intellectual property (IP) rights, rights to use the research results or share of the research income. The GST to be accounted is based on the tax fraction 7/107 of the Open Market Value (OMV) of the benefits given or if the OMV is not available, 7/107 of the full value of the grant if the recipient is unable to identify a separate value for the benefits.

Example 1

A local research institution RI1 receives a grant from a sponsor to develop a new vaccine. As part of the grant agreement, the sponsor will own all IP rights generated in the course of the research.

In this case, RI1 is making a taxable supply of service to the sponsor as it gives a direct benefit in the form of IP rights in return for the grant. If the sponsor belongs in Singapore, RI1 must account for GST at the supply based on the Open Market Value (OMV) of the IP rights or if the OMV is unavailable, full value of the grant. If the sponsor belongs outside Singapore, RI1 can zero-rate the supply provided that it is not directly in connection with goods in Singapore.

- (e) To accord the grantor “direct benefits”, the benefits must be identifiable, tangible and directly given to the grantor. The following examples illustrate certain instances where the Comptroller is prepared to accept that the “benefits” or advantages given are not considered direct benefits to the grantor.

Example 2.1

A local research institution RI2 receives a grant from a government agency to perform research on a certain disease. As part of the grant agreement, RI2 is required to submit progress reports and give the grantor access to its research results.

In this case, if the primary purpose of the grant is to give funding incentives and the purpose of these requirements are merely for the grantor to monitor the research progress and ensuring accountability of the grant usage, then they will not be considered as direct benefits given to the grantor. RI2 does not need to account for GST on the grant.

Example 2.2

A research institution RI3 receives a grant from a local non-profit organization to perform a study on certain lifestyle diseases. The grant agreement requires it to publish the research results on its website to educate the general public.

In this case, RI3 is providing benefits to the public at large and not specifically or directly to the grantor. Accordingly, it does not need to account for GST on the grant.

5.2 **Research and Development Services Supplied to Overseas Customers**

General zero-rating rules

- (a) As with all other supplies of services, research and development (“R & D”) services supplied by a GST-registered person can be zero-rated if it qualifies as an international service under Section 21(3) of the GST Act.
- (b) The zero-rating provision most relevant to R & D services is Section 21(3)(j), which provides for services to be zero-rated if the following conditions are satisfied:
 - (i) The services must be contractually supplied to an overseas person⁴
 - (ii) The services must directly benefit overseas persons who are also physically outside Singapore at the time the services are performed; and
 - (iii) The services are not performed directly in connection with goods or land in Singapore.

The interpretation of the terms “directly in connection with” and “directly benefit” are explained in the e-Tax guide “Clarification of Directly in Connection with and Directly Benefit”.

- (c) The following paragraphs illustrate the application of Section 21(3)(j) on common R & D arrangements in the biomedical industry.

5.3 **Research service agreements**

- (a) A local research organization may enter into an agreement with an overseas company or research organization to perform certain research. The service is contractually supplied to the overseas company/research institution. Presuming that the service does not relate to goods or land in Singapore, the next step is to identify the person(s) directly benefitting from the service. To do so, the research organization needs to examine the agreement. Where there is no explicit mention of the beneficiaries in the agreement, it should then examine the flow of services.
- (b) The person(s) directly benefitting refers to the person(s) who has enjoyed and consumed the service. This does not include secondary recipients, who have indirectly benefitted or will potentially benefit from the service.
- (c) If all the person(s) directly benefitting from the service belong overseas, the research service can be zero-rated under Section 21(3)(j).

⁴ Refers to person belonging outside Singapore based on the rules set out in Section 15 of the GST Act

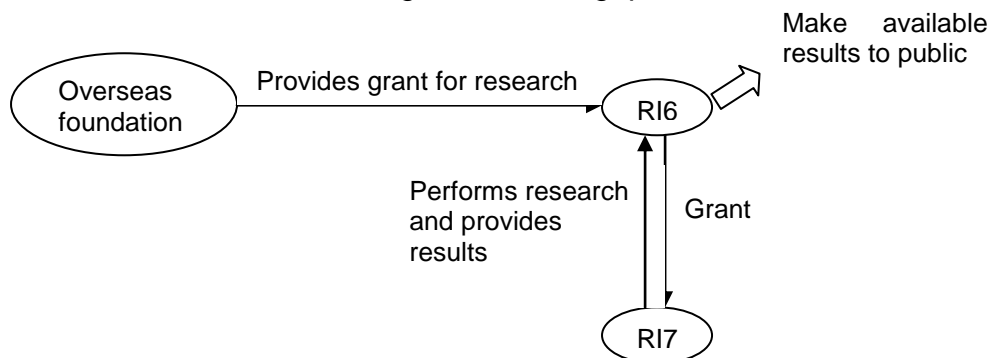
Example 3.1

A local research organization R14 collaborates with an overseas research organization R15 on the development of a new treatment, in return for a fee. R14 will perform the preliminary research and pass the results to R15, who would use the results for the actual development of the vaccine.

In this case, R14 services clearly directly benefit R15 as R15 is able to utilize the results to develop the vaccine and realize profits if the vaccine is commercialized. Since R15 belongs overseas, R14 can zero-rate the fee received provided that the service is also not directly in connection with goods in Singapore.

Example 3.2

An overseas foundation provides funding to an overseas research organization R16 to develop new therapies for certain diseases. R16 then collaborates with a local research organization R17 to conduct the research in return for a grant. R17 will provide the research results to R16, who in turn makes them available to the public worldwide as required by the overseas foundation, including those in Singapore.



In this case, R17's service only directly benefits R16. Any members of the public including those in Singapore, who would potentially benefit from the research results published by R16 are regarded as secondary recipients. This is so even if a particular member of the public in Singapore for example, an individual researcher, uses the results to successfully develop another therapy.

5.4 Research and clinical trials involving animal or human subjects

- (a) Clinical trials and certain research projects often involve animal or human subjects, for instance to test new drugs' or therapies' effectiveness. Where such trials and research are supplied to and directly benefitting overseas persons, the issue then arises whether they are considered as being supplied directly in connection with goods in Singapore due to the presence of the animal or human subjects. If so, such services cannot be zero-rated.

- (b) In such instances, the clinical trials or research services are not considered to be supplied directly in connection with goods in Singapore if they are performed for fact-finding purposes and the outcome is the analytical report. In determining the GST treatment, the animal and human subjects can be disregarded as they are merely the test subjects or ‘tools’ on which the trials or research are being conducted.

Example 4

A local clinical research organization CRO1 is engaged by an overseas pharmaceutical company to perform clinical trials in Singapore for a new intervention drug against a certain disease. Samples of the new drug will be administered to animal subjects in the trials, after which CRO1 will provide a report on the trials results to the overseas company. CRO1 is paid a fee for conducting the trials.

In this case, CRO1’s service is not considered as being supplied directly in connection with the animal subjects in the trials, as its service is to find out the drug’s effectiveness and the deliverable is the report. Hence, CRO1 can zero-rate its service to the overseas company.

5.5 Research and testing of animal or human specimens or samples

- (a) Research and laboratory testing services may also be performed on animal or humans tissue specimens or blood samples.

Prior to 1 October 2009

- (b) Tissue specimens and blood samples are clearly classified as goods. Research and laboratory testing services performed on them to establish certain physical attributes, for instance to test the blood type, was considered supplied directly in connection with the goods. Hence, if the goods are in Singapore at the time or disposed locally after the testing services are completed, the services cannot be zero-rated, notwithstanding that they are provided contractually to and directly benefitting overseas persons. This is unless the testing service qualifies for zero-rating under Section 21(3)(k) instead i.e. the testing service was performed on a sample of goods taken from goods located outside Singapore at the time.

From 1 October 2009

- (c) The Comptroller is prepared to take a wider approach and treat such research and laboratory testing services on animal or human specimens or blood samples as not being supplied directly in connection with the goods, if the following conditions are satisfied:

- (i) Similar to paragraph 5.4(b), the research or testing is performed for fact-finding purposes and the outcome is the research or test report. For example, the testing is to diagnose certain health conditions of the person from whom the specimens or samples originate;
- (ii) The research or testing does not add any value to the specimens or blood samples or enhance them in any way; and
- (iii) The specimens or blood samples have no commercial value (i.e. they cannot be traded or sold commercially) and will be discarded upon completion of the research or testing.

Example 5

A clinical laboratory L1 provides blood sample testing services, where overseas private clinics can send blood samples of their patients to conduct certain tests such as blood cell count, sugar and cholesterol levels etc. A fee is charged for the service and a test report will be provided to the clinics. The laboratory will dispose of the blood samples after the testing is completed.

In this case, L1's service is to find out the relevant levels in the blood samples and diagnose potential diseases or health risks. The outcome is the test report with the results. The service also does not add any value to the samples, which will be discarded afterwards. Hence, the testing service is not considered supplied directly in connection with the blood samples and L1 can zero-rate its service to the overseas clinics.

5.6 Research involving prototypes

- (a) Research into new formulas, designs, concepts, know-hows and technical specifications of a product may involve the creation of a prototype. The prototype may be either entirely new (i.e. built from scratch) or an enhanced version of an existing product. The prototype is usually created to test or verify the formula or know-how and simulate the actual product.
- (b) A tangible prototype is clearly classified as a good. Hence where research services are provided involving a prototype in Singapore, the issue is similarly whether the services are considered as supplied directly in connection with goods in Singapore. If so, such services cannot be zero-rated under Section 21(3)(j), notwithstanding that they are supplied contractually to and directly benefitting an overseas person.
- (c) Generally in such instances, the research services are not considered to be supplied directly in connection with the prototype if the primary objective of the services is to create or discover knowledge and the deliverable is the new or enhanced knowledge (formula, designs, concepts, know-hows or specifications). The prototype must not be the subject matter of the research

services i.e. the prototype merely serves as an instrument to develop and verify the knowledge created or discovered and simulate the actual product. This is more clear-cut in the case of research involving the creation of a new prototype. In such instance, there is no identifiable goods to apply the 'directly in connection with' test since the prototype does not exist yet at the time the research services are performed.

- (d) Whether the research is a pure service merely comprising of knowledge creation is a question of fact and depends on the business arrangement with the customer. Nevertheless, the following indicators can be applied as a guide towards determining the correct GST treatment:

Indicator	What It Suggests
Scope of service to be performed	The research is likely a pure service not directly in connection with the prototype if: <ul style="list-style-type: none"> (i) the scope of service is primarily research for the purpose of creating or discovering new or enhanced formula/know-how/concept etc and (ii) the prototype is merely to simulate the characteristics of the creation or discovery in a physical form, develop and verify it;
Type of service the customer expects to receive	Similarly, the research is likely a pure service not directly in connection with the prototype if: <ul style="list-style-type: none"> (i) the main deliverable the customer expects to receive is the research report detailing the new or enhanced formula/know-how/concept etc; and (ii) the prototype is merely for evidential or verification purpose
New form of technology	If the research culminates in the creation or discovery of a new form of technology, it indicates that it is a pure service not directly in connection with the prototype used in the developmental process
Creation of Intellectual Property (IP) rights	The creation of IP rights such as patents during the research process suggests that the research entails a new technology or invention. Similar to the above, this indicates that the research is a pure service not directly in connection with the prototype.
Prototype not available for commercial sale	The prototype should not be made available for commercial sale if it was intended only as a tool or means for testing purposes or to give visual presentation of a possibly real product. Hence, if the prototype is not available for commercial sale, it indicates that the research is more likely a pure service not directly in connection with the prototype.

- (e) As business arrangements may vary, the above indicators should be applied to the context of each specific arrangement by the parties involved. However, it should also be noted that the indicators are intended as a guide. They may not be absolute or exhaustive. When in doubt, you should write in to the Comptroller of GST with full facts of the case for advice on the appropriate GST treatment.
- (f) The above GST treatment will however not apply to the following testing and manufacturing services.

Testing services

- (g) There are certain testing services which are clearly considered as being supplied directly in connection with goods. In such instances, the goods are the subject matter of the services, unlike in the case of prototypes. Such testing service should be standard-rated, notwithstanding that the services may be supplied contractually to and directly benefitting overseas persons. This is unless the testing service qualifies for zero-rating under Section 21(3)(k) i.e. it is performed on a sample of goods taken from goods located outside Singapore at the time the services are performed.
- (h) An example would be Quality Control (QC) testing performed on newly manufactured goods.

Example 6

A local company A is engaged by an overseas manufacturer to perform QC testing on its new batch of medical equipment to be released in Singapore. In conducting the testing, Co. A is required to perform physical checks on the devices and establish certain physical attributes to ensure that they are in working condition and safe for use.

In this case, the testing service is being performed directly in connection with the goods. Hence, Co. A's supply to the overseas manufacturer is standard-rated.

Manufacturing services

- (i) Where the primary objective of the services is to produce the prototype based on pre-defined specifications and instructions given by the customer without inputting any new or enhanced knowledge, it is considered as a mere manufacturing of the prototype.
- (j) Such manufacturing services are treated as a supply of goods for GST purposes. In such instance, the supply should be standard-rated if the manufactured goods are delivered locally. Such supply of manufacturing services can only be zero-rated if the manufactured goods are exported. For

more information on zero-rating of goods, please refer to the e-Tax guide 'A Guide on Exports'.

Example 7

A local company B is tasked by an overseas pharmaceutical company to produce a prototype of a new tablet based on a ready drug formula and specific instructions. In this case, Co. B's service is merely to produce the prototype without adding any new knowledge. The supply should be standard-rated if the manufactured prototype is delivered locally.

- (k) In summary, if the deliverable of the service results in an intangible form (e.g. knowledge, know-how), any use of a tangible prototype may be considered as a tool for the service delivered and the service will not be considered as being directly in connection with the good. This is so even though the result may be presented in a physical report. However, if a large part of the deliverable is to produce a tangible "prototype", then it will be considered as directly in connection with the good. An illustration of the application of the above GST treatment to a scenario involving prototypes can be found in Appendix 1.

6 Input Tax Claims

6.1 General Rules

- (a) In general, a GST-registered person can claim the GST incurred on business expenses (referring to purchase of goods and services locally from GST-registered suppliers and imports of goods) if it satisfies all the following conditions under Sections 19 and 20 of the GST Act:
- (i) For local purchases, the goods or services must have been contractually supplied to the business. For imports, the business must be the rightful importer of the goods;
 - (ii) The goods or services are used or to be used for the purpose of the business;
 - (iii) The goods or services are used or intended to be used for the making of taxable supplies or out-of-scope supplies that would be taxable if made in Singapore;
 - (iv) The input tax claims are supported by valid tax invoices or simplified tax invoices for the goods or services supplied locally and for imports, relevant import permits showing the business as the importer; and
 - (v) The input tax claims are not disallowed under Regulations 26 or 27⁵.

⁵ Club subscription fees, medical and accident insurance premiums, medical expenses, family benefits and motor car expenses

6.2 Intention to Make Taxable Supplies

- (a) There may be situations where a GST-registered business has procured goods or services with the intention to make taxable supplies subsequently and claimed the corresponding input tax. However due to change in business circumstances, the intention may not eventually materialize, resulting in no taxable supplies being made.
- (b) In such instances, the business need not adjust the input tax previously claimed, provided it can prove that at the point of claiming, it did have firm intention to make taxable supplies in the course and furtherance of its business at the onset, with documentary evidence. For example, the business entered into a contract with its customer to make those taxable supplies. In addition, the reason for the intention not materializing subsequently has to be due to genuine circumstances beyond the business' control that prevented it from making the supplies. For example, the product that it intended to supply turns out to be commercially non-viable. Otherwise, the business needs to repay the input tax claims it has made earlier.

Example 8

A local GST-registered pharmaceutical company regularly makes taxable supplies of medicinal drugs in Singapore. It has incurred R & D expenses on a new product that it intends to commercialize, including research, testing and clinical trial services provided by a local clinical laboratory, and claimed the input tax on these expenses in its GST returns. In preparation for the launch of the new drug, it has also entered into agreements with its contract manufacturers to put them on standby for the bulk production of the drug. It has also prepared marketing and sales plan for the launch. However at the final stage of testing, new safety regulations are introduced and as a result, the drug could not obtain regulatory approval for sale.

GST treatment

In this case, the company has claimed the input tax on the R & D expenses on the basis that it intends to commercialize the new drug and make taxable supplies. The firm intention is demonstrated through the manufacturing agreements and marketing plans that it has have prepared. Further, its taxable supplies could not materialize because of genuine circumstances beyond its control, which it could not envisage i.e. introduction of new regulations. In such instance, the company is entitled to the input tax at the onset and it need not repay the input tax to the Comptroller subsequently.

- (c) However, a GST-registered business is not allowed to claim as input tax the GST attributable to activities after the intention to make taxable supplies has ceased.

6.3 Input Tax Attributable to Non-Taxable Grants

- (a) There may also be situations where you incur input tax in relation to business activities which are wholly or partially funded by non-taxable research grants. The research grants in this case are received by you as outright payments with no benefits given in return to the grantor, as explained in paragraph 5.1(c) above.
- (b) In such instances, whether you may claim the input tax in full including the proportion attributable to the non-taxable grants, depends on whether you are wholly carrying on a business for the making of taxable supplies. Where you are fully making taxable supplies for business purposes, you may claim the input tax in full. However if you are carrying on both business and non-business activities and not fully making taxable supplies, you need to apportion the input tax and may claim only the portion attributable to the taxable supplies.

You can refer to the e-Tax Guide "[GST on Non-Business Receipts – The Business Tests and Effect on Input Tax Claims](#)" for more details.

Example 9

A local research company renders R & D services to local and overseas businesses in return for a fee charged. It is also partially funded by research grants given by certain public sector agencies. It did not account for GST on the grants as it did not provide any benefits to the agencies in return for them. The company incurs input tax on expenses relating to the R & D activities, as well as general overheads for the running of its daily operations.

GST treatment

In this case, the research company is wholly carrying on business activities and making taxable supplies for a consideration. Hence, it may claim the input tax incurred in full, subject to the other conditions for input tax claims. This is notwithstanding the fact that it is being partially funded by non-taxable grants.

- 6.4 When in doubt, you should write in to the Comptroller of GST with full facts of your case for advice on the appropriate GST treatment.

7 Feedback and Contact information

For enquiries on this e-Tax guide, please contact:

Goods & Services Tax Division
Inland Revenue Authority of Singapore
55 Newton Road
Singapore 307987

Tel: 1800 356 8633

Fax: (+65) 6351 3553

Email: gst@iras.gov.sg

8 Updates and Amendments

	Date of amendment	Amendments made
1	25 Nov 2011	Revised paragraph 4.9
2	10 Jan 2012	Revisions made to take into account legislative amendments
3	1 Mar 2012	Revision to paragraph 4.9 (d) for consistency with the amendments to the e-tax guide "Approved Contract Manufacturer and Trader Scheme"

Illustration of GST Treatment for Services Involving Prototypes

Take the example of a local GST-registered biomedical research company, RX. RX is tasked with a new flu drug (ABC) by an overseas pharmaceutical company (OP).

Scenario	Indicators	GST Treatment
<p>Scenario 1 – Research involving new prototype</p> <p>RX is engaged by OP to research and develop the formula for a new flu drug. In the process, a prototype of the new drug ABC is produced to simulate the actual product.</p> <p>OP owns the patent rights for the formula. OP will use the formula RX developed to bulk-produce ABC for commercial sale</p>	<ul style="list-style-type: none"> ✓ Primary service is to develop the new formula ✓ Main deliverable is the research results with the new formula ✓ Prototype is to simulate the actual product and prove that the formula works ✓ Prototype did not exist at start of the research ✓ The formula is a new invention ✓ Creation of intellectual property rights i.e. patent, over the formula ✓ Prototype by itself is not available for commercial sale 	<p>RX's service to OP is the development of ABC's formula. The prototype produced is a by-product that can be disregarded.</p> <p>RX's service is not directly in connection with the prototype. RX can zero-rate its supply to OP.</p>
<p>Scenario 2 – Research involving existing prototype</p> <p>ABC is an existing flu drug in the market but its users have reported a drowsy side effect.</p> <p>RX is engaged by OP to develop an enhanced formula for ABC without the side effect. RX performs the research using samples of existing ABC and developed an enhanced formula ABC++. The ABC</p>	<ul style="list-style-type: none"> ✓ Primary service is to develop the enhanced formula for ABC ✓ Main deliverable is the research results with the enhanced formula ✓ Prototype is to simulate the actual product and prove that the formula works ✓ The ABC++ formula is a new invention ✓ Creation of intellectual property rights i.e. patent, over the formula ✓ The ABC++ prototype by itself is not available for commercial sale 	<p>There are 2 sets of goods in question – ABC samples and ABC++ prototype</p> <p><u>ABC samples</u> The samples are merely tools for RX to conduct its research and there is no value-add to them. Also, they are discarded after the service is completed.</p> <p><u>ABC++ prototype</u> The prototype is intended to verify that the enhanced formula works. RX's primary service to OP is the development of the</p>

<p>samples used will be discarded on completing the research. In the process, a prototype of ABC++ is created to test the formula works</p>	<p>✓ No value added to the sample used and they are discarded upon completion of the service</p>	<p>enhanced formula. Hence in this case, the goods (i.e. samples and prototype) can be disregarded. RX can zero-rate its service to OP as it is not directly in connection with the goods.</p>
<p>Scenario 3 – Testing of newly manufactured goods</p> <p>RX is engaged by OP, the manufacturer of ABC, to perform QC checks on newly manufactured batches of ABC++ to be distributed in Singapore. RX is required to check that the goods can withstand Singapore’s climate, packaging is intact etc</p>	<p>✓ Primary service is testing of the goods ✓ Establishes physical attributes of the goods ✓ No creation of knowledge ✓ The goods are available for commercial sale</p>	<p>The testing service is performed directly in connection with the goods in Singapore. RX must standard-rate its supply to OP.</p>
<p>Scenario 4 – Manufacturing of Prototype</p> <p>RX is engaged by OP to produce a prototype of the drug ABC based on the formula and specifications provided by OP. After which, RX will deliver the prototype to OP’s related company in Singapore for further testing.</p>	<p>✓ Primary supply is manufacturing of the prototype ✓ No creation of knowledge</p>	<p>The manufacturing service is a supply of goods for GST purposes. Since the goods are locally delivered, RX must standard-rate its supply to OP. This is notwithstanding whether the prototype has any value</p>