

# **IRAS CIRCULAR**

## **RESEARCH AND DEVELOPMENT TAX MEASURES**



**INLAND REVENUE  
AUTHORITY  
OF SINGAPORE**

Published by  
Inland Revenue Authority of Singapore

Published on 31 October 2008  
Revised on 12 December 2008  
(Revisions have been made to paragraph 11(f), (g), (h) and  
Chart C – Item (4)(viii) of Annex A)

© 2008 IRAS 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

<b>Introduction</b> .....	1
<b>Qualifying R&amp;D Activities</b> .....	1
<b>New R&amp;D Tax Measures</b> .....	2
• Liberalized R&D Tax Deductions.....	2
• RDA Scheme.....	3
• RISE Scheme.....	3
<b>Annex A: Ministry of Finance’s R&amp;D Guidance Circular</b> <b>- Guidelines on what is R&amp;D for Income Tax Purposes</b>	
• Purpose.....	4
• Budget 2008 Tax Concessions to Encourage R&D.....	4
• What is R&D?.....	5
• What Will Not Qualify as R&D.....	5
• What Can Qualify for the New R&D Tax Benefits?.....	7
• Making Claims for the R&D Tax Concessions.....	7
• Chart A: Summary of R&D Tax Benefits.....	8
• Chart B: What is a Qualifying R&D Project, Assuming that it Does Not Fall Within the Exclusion List?.....	9
• Chart C: Does My Project Qualify As R&D? – A Checklist.....	10
• Part A: Frequently Asked Questions.....	12
• Part B: Examples of What May Qualify as R&D for the new R&D tax benefits.....	13
• Part C: Examples of what will not qualify as R&D for the new R&D tax benefits.....	15
<b>Annex B: Liberalized R&amp;D Tax Deductions</b>	
• Introduction.....	17
• Details of Tax Changes	
(i) Relaxation of the “Trade or Business” Conditions.....	17
(ii) Enhanced Deduction Under New Section 14DA.....	21
• Other Details.....	24

• Administrative Procedures.....	24
Annex B-1: Examples Illustrating Tax Deduction & Capital Allowance Claims in Respect of Qualifying R&D Activities that are not Related to Trade or Business Carried on by Taxpayer.....	26
Annex B-2: Example Illustrating Computation of Quantum of Qualifying R&D Expenditure Eligible for Further Deduction Under Section 14D and S14DA.....	28
<b>Annex C: R&amp;D Tax Allowance Scheme</b>	
• Introduction.....	30
• Computation of Amount of R&D Tax Allowance.....	30
• Utilization of R&D Tax Allowance.....	32
• Administrative Procedures.....	35
Annex C-1: Examples Illustrating Computation of R&D Tax Allowance Creditable to R&D Account.....	37
Annex C-2: Examples Illustrating Computation of Incremental Qualifying R&D Expenditure.....	41
Annex C-3: Examples Illustrating Utilization of R&D Tax Allowance .....	42
<b>Annex D: R&amp;D Incentive Scheme for Start-Up Enterprises (RISE) - Cash Grants for Tax Losses of Start-up Enterprises</b>	
• Introduction.....	45
• General Conditions to Qualify for Cash Grants.....	45
• Computation of Cash Grant.....	47
• Carry Forward of Unutilized Tax Adjusted Loss.....	47
• Administrative Procedures for Claiming R&D Cash Grants.....	48
Annex D-1: Examples Illustrating Computation of R&D Cash Grant and Effects of Electing to Convert Current Year Unutilized Tax Adjusted Losses into an R&D Cash Grant..	50
<b>Annex E: Project Details.....</b>	<b>54</b>

## INTRODUCTION

1. On 15 February 2008, the Minister for Finance introduced in his Budget Statement 2008, a package of new Research & Development (“R&D”) measures aimed at encouraging more pervasive R&D in Singapore.
2. Specifically, the new R&D measures comprise:
  - (i) liberalised R&D Tax Deductions;
  - (ii) new R&D Tax Allowance Scheme; and
  - (iii) new R&D Incentive for Start-up Enterprises.
3. The new R&D measures are targeted at encouraging businesses to build up R&D capabilities in Singapore. The new measures will therefore only apply to R&D expenditure incurred by a taxpayer who is the beneficiary of the R&D activities. Accordingly, the new measures will not apply to R&D expenditure incurred by a taxpayer who is in the trade or business of providing R&D services (i.e. an R&D service provider). For example, a taxpayer who provides R&D services to another person for a fee, say on a cost-plus basis, will not qualify for the new R&D measures.
4. This circular provides details of the new R&D measures announced in Budget 2008.

## QUALIFYING R&D ACTIVITIES

5. To qualify for any of the new R&D measures, a taxpayer must incur expenditure on undertaking R&D activities in Singapore which meet certain conditions and also do not fall within the list of specified excluded activities.
6. For this purpose, R&D is defined to mean<sup>1</sup>:

“any systematic, investigative and experimental study that involves novelty or technical risk carried out in the field of science or technology with the object of acquiring new knowledge or using the results of the study for the production or improvement of materials, devices, products, produce, or processes, but does not include —

  - (a) quality control or routine testing of materials, devices or products;
  - (b) research in the social sciences or the humanities;
  - (c) routine data collection;
  - (d) efficiency surveys or management studies;

---

<sup>1</sup> Definition of “R&D” as amended by clause 2 of the 2008 Income Tax (Amendment) Bill.

- (e) market research or sales promotion;
  - (f) routine modifications or changes to materials, devices, products, processes or production methods;
  - (g) cosmetic modifications or stylistic changes to materials, devices, products, processes or production methods; or
  - (h) development of a computer software that is not intended to be sold, rented, leased, licensed or hired to 2 or more persons who are not related parties<sup>2</sup> to each other and to the person who develops the software or on whose behalf the development of the software is undertaken”
7. Further guidance on the application of the R&D definition above for the purpose of determining whether a taxpayer qualifies for any of the new R&D measures is also given in the Ministry of Finance’s R&D Guidance Circular dated 31 October 2008, attached as Annex A to this circular.

## **NEW R&D MEASURES**

8. The new R&D measures are summarized in the paragraphs below. More details of each measure are given in Annexes B, C and D respectively.

### ***Liberalized R&D Tax Deductions***

9. The tax measures comprise two enhancements to the deductions of R&D expenditure. With the liberalization, a taxpayer that undertakes qualifying R&D activities in Singapore is now able to claim the following:
- (a) tax deduction for expenditure incurred for undertaking R&D in any area. Previously, tax deduction was only allowed for R&D expenditure incurred by a taxpayer who carries on a manufacturing or service trade or business and the R&D expenditure must relate to the trade or business carried on by the taxpayer;
  - (b) a further tax deduction equal to 50% of qualifying R&D expenditure (i.e. total tax deduction of 150% of such R&D expenditure).
10. The details and operation of the liberalized R&D tax deductions are further explained in Annex B.

---

<sup>2</sup> For this purpose, a person is a related party to another if he, directly or indirectly, controls the other person, or is controlled, directly or indirectly, by the other person, or where he and the other person, directly or indirectly, are under the control of a common person. Please refer to clause 2 of the 2008 Income Tax (Amendment) Bill.

### ***R&D Tax Allowance (“RDA”) Scheme***

11. The RDA scheme is a new incentive scheme targeted at encouraging businesses, particularly the Small and Medium-Sized Enterprises, that enjoy profitability to engage in qualifying R&D activities in Singapore.
12. The scheme allows a taxpayer to earn a tax allowance equal to 50% of its chargeable income up to \$300,000 in a Year of Assessment (“YA”). The taxpayer can deduct the tax allowance earned from its assessable income in any subsequent YA up to YA2016, if certain conditions were met.
13. The details and operation of the new RDA scheme are further explained in Annex C.

### ***R&D Incentive for Start-Up Enterprise (“RISE”) Scheme***

14. The new RISE scheme works as a grant scheme for R&D intensive start-ups, which may not be profitable in their initial years of set-up.
15. The scheme allows loss-making start-ups which expend at least \$150,000 in a year on qualifying R&D activities in Singapore to convert their adjusted tax losses of up to \$225,000 (i.e. based on 150% of \$150,000) into a cash grant at the rate of 9%. Accordingly, the maximum cash grant a start-up may obtain under the scheme is \$20,250 (i.e. \$225,000 X 9%). The scheme is available to a start-up company in its first 3 YAs of incorporation.
16. The details and operation of the new RISE scheme are further explained in Annex D.

### **ENQUIRIES**

17. If you wish to seek clarification on the contents of this circular, please call IRAS at 1800-356 8622.

**MINISTRY OF FINANCE'S  
R&D GUIDANCE CIRCULAR DATED 31 OCTOBER 2008**

**GUIDELINES ON WHAT IS RESEARCH & DEVELOPMENT FOR INCOME  
TAX PURPOSES**

**Purpose**

1. This MOF circular provides guidance on what is research and development (R&D) for income tax purposes.

**Budget 2008 tax concessions to encourage R&D**

2. Government wants to encourage business enterprises, big and small, to do more R&D in Singapore.
3. In Budget 2008, four income tax changes were introduced to encourage pervasive R&D in Singapore. We recognize that whether an enterprise chooses to undertake R&D will be based on commercial considerations. The R&D tax changes introduced in Budget 2008 are a means of additional recognition for enterprises that do R&D, while at the same time encouraging the build-up of R&D capability in Singapore.
4. The R&D-related income tax changes are:

**(a) Enhanced Tax Deduction for Expenses Incurred on R&D**

- An increase from 100% to 150% in tax deduction for R&D done in Singapore
- For example, for every \$100,000 of expenses on R&D done in Singapore, \$150,000 can be claimed as a tax deduction.

**(b) R&D in New Areas**

- The tax deduction for R&D can be claimed even if the R&D is not relevant to the taxpayer's existing trade or business.
- This will benefit taxpayers intending to do R&D in unrelated fields.

**(c) R&D Tax Allowance (RDA)**

- This is a tax concession to encourage business enterprises to invest in R&D.
- Taxpayers can earn this allowance amounting to 50% of the first \$300,000 of income chargeable to income tax (i.e. amount of R&D allowance earned each year of assessment is capped at \$150,000 per year).
- The allowance can be used to offset taxable income in any subsequent year of assessment up to year of assessment 2016 if they spend more on R&D done in Singapore.

**(d) R&D Incentive for Start-Up Enterprises (RISE)**

- A grant scheme for R&D intensive start-ups which have yet to generate taxable income during the first three years of assessment.
- The scheme enables loss making start-ups spending annually at least \$150,000 on R&D done in Singapore to convert up to \$225,000 (based on 150% of \$150,000) of tax losses arising from the R&D expenditure to cash grants at a rate of 9%, translating to a grant of up to \$20,250, from the government.
- Start-ups can also choose not to convert their tax losses into grants and instead, carry forward their losses to offset against future years' taxable profits.

5. These new R&D tax concessions are broad-based schemes - taxpayers do not need to apply to any government agencies to qualify for the scheme. Taxpayers will instead self-assess their eligibility for the schemes based on guidelines issued by the Inland Revenue Authority of Singapore, and make the relevant claims in their annual income tax returns.
6. Chart A provides a summary of the R&D tax benefits.

**What is R&D?**

7. This circular provides guidance to taxpayers on what is R&D for income tax purposes. To qualify for the new R&D tax concessions, in addition to being a qualifying R&D project, the R&D project needs to be conducted in Singapore. The R&D can either be done by the taxpayer himself, or contracted to a R&D organization in Singapore.
8. Qualifying R&D projects do not just include R&D done in the manufacturing sector, but also R&D in the services sector. What then will be a qualifying R&D project?
9. We will first talk about what will not qualify as R&D.

**What will not qualify as R&D**

10. A project will not qualify as R&D if it falls within the list of activities specifically excluded under the Income Tax Act. The list of excluded activities will be amended to make clearer what would not be considered as R&D. They are excluded from the R&D tax incentives for the following reasons:
  - a) To focus on R&D in the field of science or technology;
  - b) To distinguish R&D from routine improvements. Enterprises need to periodically improve their products or processes. R&D concessions are intended to apply to improvements of products

and processes that would not have occurred in the routine and ordinary course of the taxpayer's work; and

- c) To distinguish between R&D work, and pre- and post-R&D activities. The normal tax deduction rules for expenses incurred for the latter would apply.

11. The excluded activities are:

- a) Quality control or routine testing of materials, devices, or products;
- b) Research in the social sciences or the humanities;
- c) Routine data collection;
- d) Efficiency surveys or management studies;
- e) Market research or sales promotion;
- f) Routine modifications or changes to materials, devices, products, processes or production methods; **(NEW)**
- g) Cosmetic modifications or stylistic changes to materials, devices, products, processes or production methods; **(NEW)**
- h) Development of a computer software that is not intended to be sold, rented, leased, licensed or hired to 2 or more persons who are not related parties<sup>#</sup> to each other, and to the person who develops the software or on whose behalf the development of the software is undertaken. **(NEW)**

<sup>#</sup>“related parties” has the same meaning as footnote 2 of main circular.

Items (f) to (h) are new exclusion items to give greater clarity on how IRAS would regard a project as a non-qualifying project.

12. In the case of research in the social sciences and humanities and software development not intended for sale/rent/licence etc to non-related parties, while these are excluded activities, they may be regarded as activities supporting a qualifying R&D project if they are undertaken primarily for the purpose of supporting a qualifying R&D project. In such a case, the expenses incurred for the supporting research in social sciences and humanities or software development used to support a qualifying R&D project can be included together with expenses incurred on the qualifying R&D project, and be eligible for the new R&D tax concessions.

13. Where a project does not qualify to be R&D and thus the R&D tax concessions, the tax deductibility of the relevant expenses may still qualify for normal tax deduction, subject to the tax deduction rules under S14 and S15 of the Income Tax Act. This means that the expenses need to be wholly and exclusively incurred in the production of income, before they can qualify for tax deduction. The tax deduction will be at 100% of the expenses.

## What can qualify for the new R&D tax benefits?

14. If the activity is not within the exclusion list, it may potentially qualify as R&D if it is done by the taxpayer itself or by an organization conducting the R&D in Singapore. To ascertain whether the activity can indeed be eligible, a qualifying R&D project needs to meet three requirements:
- a) What did the taxpayer do? – The activity undertaken must involve a systematic, investigative and experimental study in the field of science or technology;
  - b) Why did the taxpayer do the study? - The objective of the study must be to:
    - i. Acquire new knowledge; or
    - ii. Create new or improve existing products or processes;

### AND

- c) What did the study involve? – To achieve the objective of the study, the study must
  - i. Seek to create novel products or processes; or
  - ii. Involve technical risk, i.e. a scientific or technological issue which cannot be readily resolved by a competent professional in the relevant field.

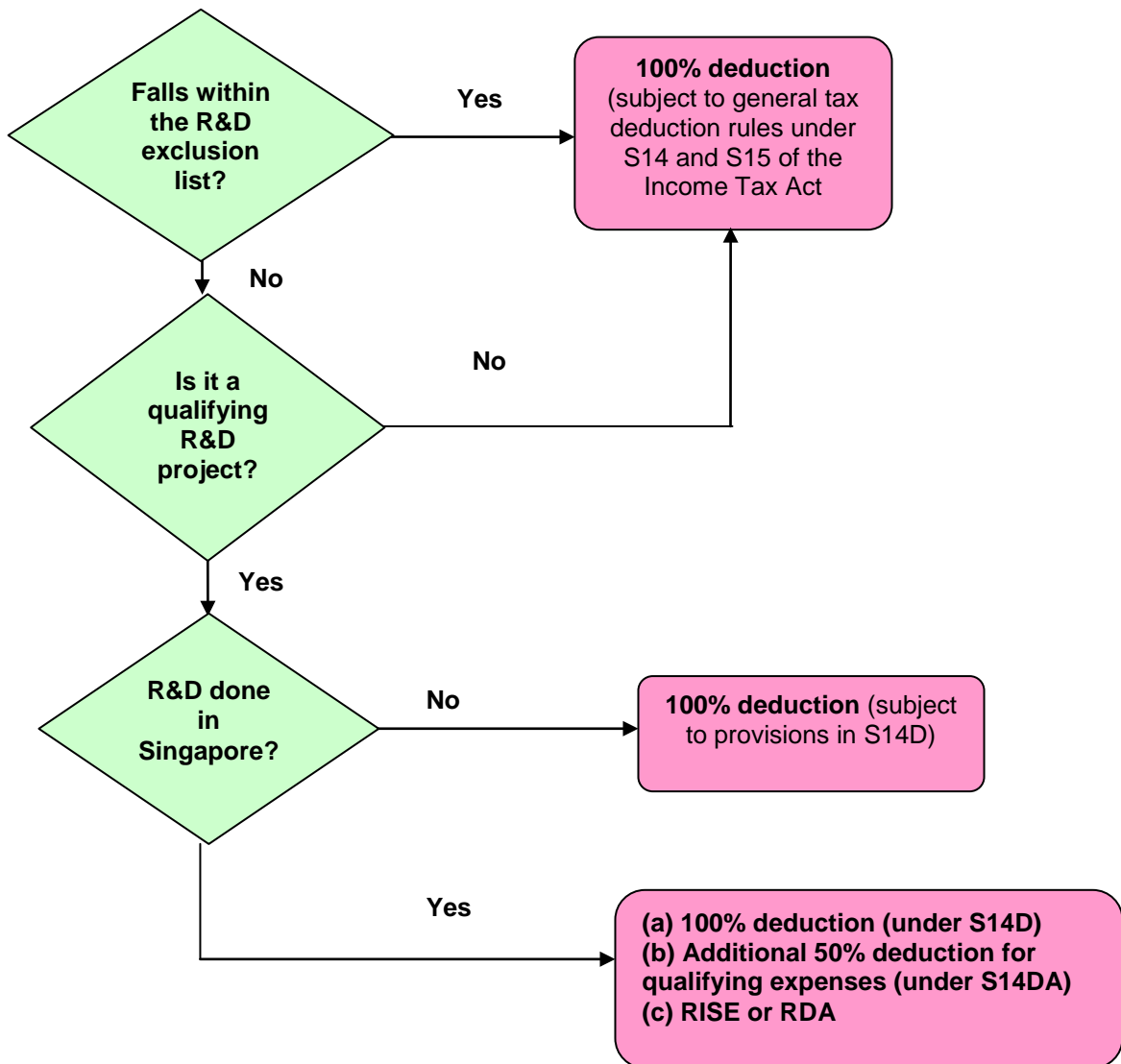
\* “Products” includes materials, devices and services.

15. Activities that support the R&D work may qualify for the R&D tax concessions if they are undertaken wholly or mainly for the purpose of the qualifying R&D project.
16. Charts B and C provide further details of the above three requirements.

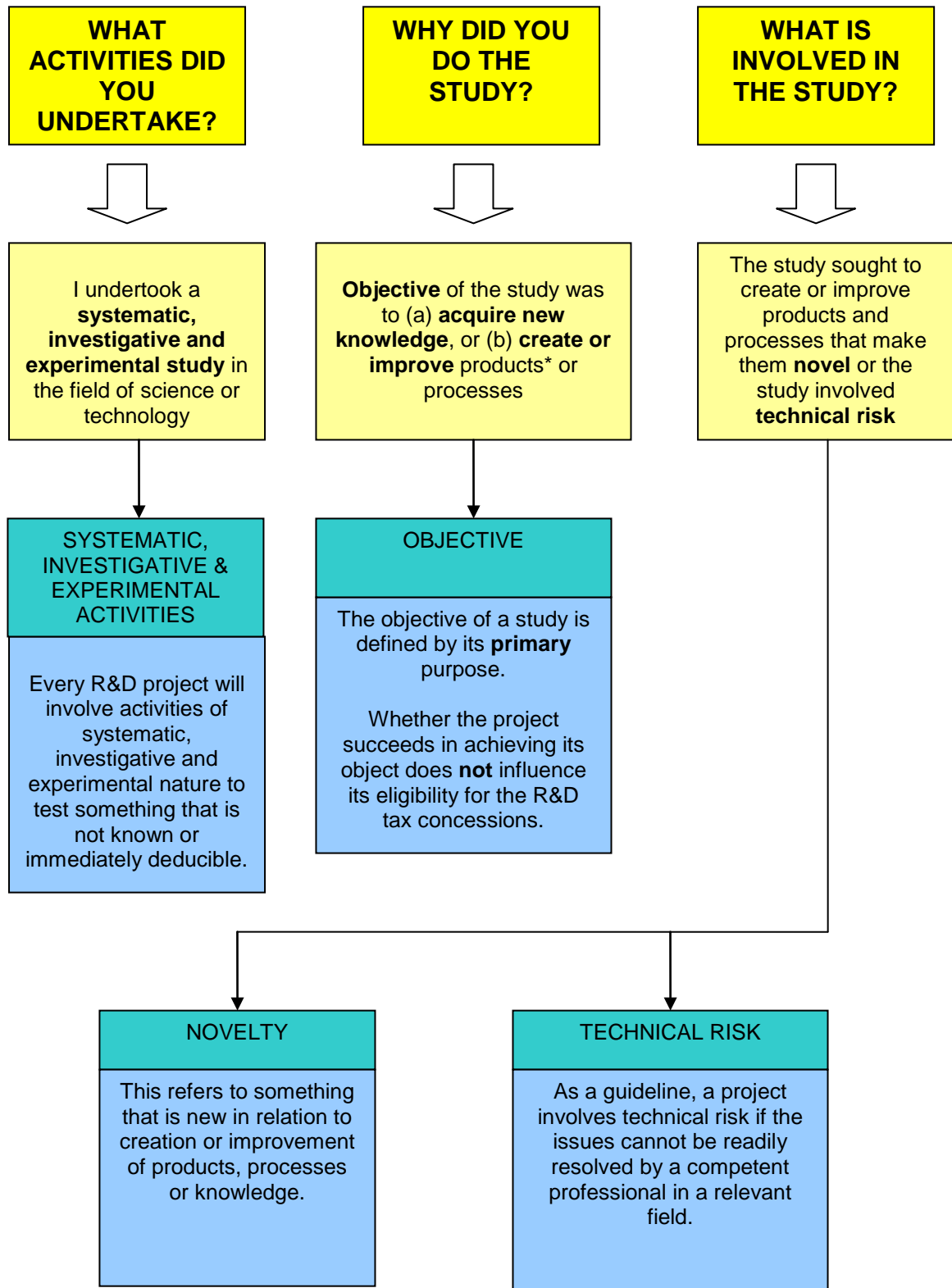
## Making claims for the R&D tax concessions

17. IRAS has issued a circular titled R&D Tax Measures which provides details of the measures and procedures for claiming R&D tax benefits. We need to strike a balance between ensuring valid claims for the R&D tax benefits on one hand, and making it possible for taxpayers to claim these benefits with minimal administrative inconvenience, especially for the SMEs. To ease taxpayers' claim for the R&D tax benefits, Annex E of IRAS' circular contains guidelines of the information to be provided for the purposes of supporting the companies' claim for R&D tax concessions.

**Chart A: Summary of R&D Tax Benefits**



**Chart B: What is qualifying R&D project, assuming that it does not fall within the exclusion list?**



\* "Products" includes materials, devices and services.

## **CHART C: Does My Project Qualify as R&D? – A Checklist**

**(This checklist should be read in conjunction with the framework in Chart B)**

### **1 WHAT TYPE OF ACTIVITY DID YOU CARRY OUT?**

The project must involve systematic, investigative and experimental study in the field of science or technology, which comprise **all** of the following activities:

- (i) The study is conducted by suitably qualified personnel;
- (ii) Work is done to discover something unknown, to test a proposed solution to a technical problem, or to find something out (not simply to confirm something already known or demonstrate a known fact);
- (iii) Collation of data or results from the testing; and
- (iv) Report of conclusion reached (or not reached, in the case of aborted projects)

### **2 WHY DID YOU DO THE STUDY?**

The **primary** purpose of the study is one or more of the following:

- (i) Acquire new knowledge
- (ii) Create new products or processes
- (iii) Improve existing products or processes

### **3 WHAT IS INVOLVED IN THE STUDY?**

The study must seek to achieve novelty or the study involves technical risk:

(i) **Novelty** can be achieved through one or more of the following (the following list is not intended to be an exhaustive list of what will be regarded as novel):

- (A) Award of a patent for the product, process or information
- (B) The product or process is the first of its kind in Singapore (excluding content-based products such as movies, electronic versions of print media etc)
- (C) Create a new process to produce a product with similar or improved specifications as existing products
- (D) Duplicate the effect of an existing process in a new or improved way
- (E) Use knowledge (including technology) or process from one industry in another industry where such adoption does not currently exist
- (F) Use new or existing technology (excluding off-the-shelf technologies) to deliver services in new ways

(ii) **Technical risk** exists when technical issues arising from any one or more of the following cannot be readily resolved by a competent professional in the relevant field (the following list is not intended to be an exhaustive list of what will be regarded as technical risk):

- (A) Use new materials or ingredients to improve functionalities of existing products
- (B) Use new materials or ingredients to create new products
- (C) Produce smaller or lighter products in the product class while retaining functionalities
- (D) Fundamentally changing the physical characteristics (beyond changes that are merely cosmetic) of products
- (E) Integration of two or more technologies that were not previously combined to create new products or processes or improve existing products or processes

#### **4 WHAT IS NOT R&D**

- (i) Cosmetic or stylistic changes that do not improve or introduce new functionalities or efficacy
- (ii) Testing for quality control
- (iii) Routine modifications, including customization of off-the-shelf solutions that are carried out by competent professionals in the relevant field
- (iv) Market research
- (v) Routine data collection
- (vi) Efficiency surveys or management studies
- (vii) Research in the field of social sciences or the humanities (*Exception:* This may be eligible as a supporting activity if the work is undertaken mainly in support of the qualifying R&D project.)
- (viii) Software development not intended for purpose of sale, rent, licence, hire or lease to two or more persons who are not related parties to each other, and to the person who develops the software or on whose behalf the development of the software is undertaken. (*Exception:* This may be eligible as a supporting activity if the work is performed mainly in support of the qualifying R&D project)

“Products” encompass consumer products and product range, as well as other products used within the business such as manufacturing equipment. It also includes materials, devices and services.

What is 'new' will be assessed with reference to what is available in the public domain in Singapore.

## Part A - Frequently Asked Questions:

### When does a project start and end?

1. It is important to identify the start and end of the project because only expenditure related to the project are eligible.
2. A study starts when the scientific or technological objective of the project has been identified, and activities directly undertaken to address the technical or scientific objective commences.
3. The study ends when one of the following occurs (whichever is the latest) -
  - (a) all activities related to testing the hypothesis is completed and a conclusion reached;
  - (b) when a prototype or pilot plant with all the functional characteristics of the final product or process is produced; or
  - (c) when the study is terminated.

#### **Example: Start and end of project**

Company A wants to produce an improved sportswear fabric with uniform two-dimensional (length and width) stretch. The company has determined with its consultants that current processes using existing yarns can only result in fabrics that stretch lengthwise (warp), but insufficiently in the weft (width). The company plans to undertake a project to produce fabric with 25% stretch on both warp and weft, and competent professionals in the textile industry are uncertain how to achieve it. The R&D project commences with the identification of the technological uncertainty (fabric with 25% stretch on both warp and weft) and commencement of work to resolve the uncertainty, including planning the project and developing the hypothesis.

The R&D project end when the trials establish that the new yarn and processes produce a fabric that meets the firm's technical requirements. Subsequent work, such as demonstrating the new processes to the board and customers and work to patent, market and tool-up for full-scale production, are ineligible activities

#### **Example: Concurrent projects**

A R&D division within a company has created three variations of a basic product (for example, a MP3 player) after continuous R&D (assuming the product variations are not merely routine, cosmetic or stylistic). The R&D activities involved with creating the three variations will be regarded as three separate R&D projects rather than one R&D project. Accordingly, there should be three separate claims for the R&D concessions.

Can developments based on existing practice be qualifying R&D?

4. Knowledge, tools or models may already exist in your trade or profession, or be available through consultancy services, which allow you to manage scientific or technological uncertainty. The application or customization of these tools or knowledge to a new environment will be regarded as installation projects, and not qualifying R&D projects, as they can be adopted or customized by competent professionals in the relevant field with reasonable certainty that the approach will work i.e. there is no scientific or technological uncertainty involved.
5. The use of existing tools or technologies to develop something novel, or where there is uncertainty that the approach may work (technical risk), may give rise to qualifying R&D.

What is regarded as routine testing?

6. Tests to commission new equipment, calibrate, fine-tune, or optimize processes or production systems are regarded as routine testing activities and hence not qualifying R&D activities, unless there is scientific or technological uncertainty to resolve, or novelty involved.
7. In the case of fine-tuning or calibration of new systems to optimize performance, even though these processes may involve running tests and recording and evaluating the results, these are part of standard processes used in the relevant fields.
8. Notwithstanding the above, as stated in paragraph 15 of the circular above, routine testing activities that support the R&D work may qualify for the R&D tax concessions if they are undertaken wholly or mainly for the purpose of the qualifying R&D project.

---

**Part B - Examples of what may qualify as R&D for the new R&D tax benefits**

[Note: The examples in this section are simplified, and assume that no such products or process currently exist.]

**i) Projects involving novelty:**

- (a) ***Using new materials to improve functionality of existing products.***  
A manufacturer created a new light but strong durable environmental-friendly material for making of mountaineering boot. The R&D involved identifying potential raw materials, systematically testing the materials using non-traditional methodologies and leveraging on new technology

to assess the parameters and suitability of the new material for the production of the mountaineering boot.

**(b) Patent awarded.** The business successfully developed a product, which is patented. Evidence of patenting gives strong evidence that the project involved novelty.

**(c) Use of new ingredients to create new products, or to improve functionality.** Creating new flavors of a particular type of food in itself will not qualify as novel. This includes, for example, adding barley bits in soyamilk, creating new flavors of ice cream and toppings for bread or laksa pasta. However, the creation of the new flavor may affect stability of the product, shorten the shelf life of the product, or require new packaging techniques. A food company that intends to produce a new range of sauces or cuisines may experience these issues. A food manufacturer developing a new range of fat-free products (improving functionality of food) could similarly experience these issues. The typical activities of food product development from concept to commercialization includes, but are not limited to conceptualization, ingredients, product and process development, formulation, prototyping, testings (include shelf-life, sensory evaluations), packaging and pilot runs. Work to overcome these technological uncertainties may be a qualifying R&D project.

**(d) Use new or existing technology (excluding off-the-shelf technologies) to deliver services in new ways or produce new or enhanced products.**

(i) A laboratory analytical technology company developed a highly specialized non-routine laboratory analytical service to serve oil and gas industries. The R&D involved designing and building new specialist testing equipment by integrating existing technologies in another industry where such adoption does not currently exist.

(ii) Work to develop new special effects techniques used in the production of a movie e.g. crowd animation software for movie production; development of interoperable middleware interactive content engine for digital TV or other media platform. The activities involved creating or developing technologies to produce such products. These activities may qualify as R&D, subject to being outside the exclusion list in paragraph 11 and meeting the three requirements in paragraph 14 of this circular.

## ii) Project involving technical risk:

**(a) Integration of two or more technologies that were not previously combined to create new products or process OR improve existing products or processes.**

(i) A software development company creating new encryption or security techniques for financial institutions that do not follow established methodologies. It has contracted with two financial institutions to

supply the software and is actively promoting the software to other potential buyers.

- (ii) Software developed to form an integral part of a new or improved electrical or mechanical product can be a supporting R&D activity if such creation of electrical or mechanical product qualified as R&D in its own right.

**(b) Fundamentally changing the physical characteristics (beyond changes that are merely cosmetic) of products.** Creating an alternative process to develop yogurt on a stick - turning yogurt into frozen form that can be attached to a stick and produced commercially can involve technical risk if such a process for doing so is unknown. There will be a systematic, experimental and investigative process to arrive at the actual method of making yogurt freeze in a manner that preserves taste and nutrition, and yet suitable for exports to overseas markets.

**(c) Testing activities.** Clinical trials conducted to study the safety or efficacy of new or improved drugs or devices before commercial production would be qualifying R&D if it is an integral part of developing a new or improved drug or device.

### **Part C - Examples of what will not qualify as R&D for the new R&D tax benefits**

**(a) Cosmetic or stylistic changes.** Creating new colors, shapes and designs of frames for spectacles by itself will not constitute novelty, as these are no more than cosmetic or stylistic changes. But the activity may qualify as novel if it involves a new process for creating patterns on the frames.

**(b) Installation projects.** Installation of existing RFID, POS systems by supermarkets will not be regarded as involving technical risk or novelty, even though the installation may involve some customization. The process involves installation of well-established solutions, and any customization required is achieved through standard techniques that can be executed by engineers familiar with these systems.

**(c) Market or consumer surveys.** Market survey or researching market niches in which R&D might benefit a company, examination of a project's financial, marketing, and legal aspects or administrative activities are not eligible activities.

**(d) Creation of content-related products.** Work involved in creating the contents for content-related products, such as the contents of movies, television programs, books, PC or console games, will not be regarded as R&D. Similarly, making print-media available in electronic form will not constitute R&D.

**(e) Studies in the field of social sciences or humanities.** Studies in the field of social sciences or humanities will not qualify for the R&D tax concessions. However, in many products, study of human behaviour (social sciences) forms an integral part of product development. For example, development of flight testing equipment will require observation of human reactions in various situations, development of phone that involves "multi-touch technology" which enables users to interact directly with the phone via touching the screen directly – requires "gesture interpretation" involving visual processing and multi-dimensional simulation of the configuration of one's body e.g. hand. Hence, where the research in the field of social sciences or humanities is undertaken wholly or mainly for the purpose of a qualifying R&D project, the activity may be regarded as a supporting activity, and accordingly, the related expenditure will qualify for the R&D tax concessions.

**(f) Software development.** Development of in-house application using known platforms to automate billing processes will not qualify for the R&D tax concessions.

## LIBERALIZED R&D TAX DEDUCTIONS

### INTRODUCTION

1. The Government has liberalized tax deduction of expenditure incurred by a taxpayer on qualifying R&D activities conducted in Singapore as follows:
  - (a) the taxpayer can claim tax deduction of expenditure incurred for undertaking R&D in any areas, whether or not the R&D is related to the manufacturing or service trade or business carried on by the taxpayer; and
  - (b) the taxpayer can also claim a further deduction equal to 50% of the qualifying R&D expenditure i.e. total deduction of 150% of such R&D expenditure.
2. The scope of qualifying R&D activities is explained in paragraph 6 of the main circular to which this Annex relates.
3. The above tax changes are elaborated in turn below.

### DETAILS OF TAX CHANGES

#### ***(I) Relaxation of the “Trade or Business” Conditions***

4. Before the liberalization, a taxpayer who claims tax deduction of R&D expenditure under section 14D or 14E of the Singapore Income Tax Act (“SITA”) must satisfy the following “trade or business” conditions:
  - (a) the taxpayer must carry on a manufacturing trade or business, or a trade or business for the provision of services; and
  - (b) the R&D expenditure must be incurred in respect of the trade or business carried on by the taxpayer.
5. With the liberalization, the “trade or business” conditions above will be relaxed with effect from Year of Assessment (“YA”) 2009 for qualifying R&D activities conducted in Singapore, as follows:
  - (a) tax deductions of R&D expenditure will no longer be restricted only to a taxpayer that carries on a manufacturing trade or business, or a trade or business for the provision of services. Instead, a taxpayer who carries on any trade or business,

regardless of its nature, can claim tax deduction of R&D expenditure under section 14D or 14E; and

- (b) a taxpayer can claim deductions under section 14D or 14E on expenditure incurred on qualifying R&D activities conducted in Singapore during the basis periods for YA 2009 to YA 2013 (both YAs inclusive) which is unrelated to the trade or business carried on by him.
6. The changes are made with the objective of encouraging the creation of new and innovative products, processes and services in Singapore. Accordingly, the “trade or business” conditions are relaxed only for expenditure on qualifying R&D activities conducted in Singapore.
7. A taxpayer who incurs expenditure on R&D performed outside Singapore will not qualify for the liberalized tax deductions. Nonetheless, a taxpayer in such circumstances can continue to qualify for 100% deduction of R&D expenditure under section 14D, provided the expenditure is incurred by the taxpayer in respect of his trade or business.

Manner of set-off for expenditure incurred on qualifying R&D activities conducted in Singapore not relating to existing trade or business for YA 2009 to YA 2013

8. Where a taxpayer concurrently derives both income subject to tax at the prevailing corporate tax rate (“normal income”) and income subject to tax at concessionary rate(s) (“concessionary income”), tax deduction of any R&D expenditure that is not related to his trade or business, shall first be made against his normal income. Where his normal income cannot sufficiently absorb the R&D expenditure, the excess R&D expenditure is treated as a normal unutilized loss and is available for set-off against his concessionary income in accordance with section 37B of the SITA.
9. Where a taxpayer derives only concessionary income that is subject to tax at one or more concessionary tax rates, and incurs R&D expenditure that is not related to the trade or business he carries on, the R&D expenditure is allowed as a deduction against his income from the trade or business that is subject to tax at the highest concessionary tax rate, after applying the following formula:-

$$A \times \frac{\text{Prevailing Corporate Tax Rate}}{\text{Highest Concessionary Tax Rate}}$$

Where A is the total amount claimable in respect of the non-trade related R&D expenses, under sections 14D, 14DA and 14E of the SITA.

10. If the concessionary income subject to tax at the highest concessionary rate referred to in paragraph 9 is not sufficient to fully absorb the R&D expenditure, the excess R&D expenditure will be treated as part of the

unutilized losses for the trade or business from which concessionary income is derived and is available for set-off against any other concessionary income in accordance with section 37B of the SITA.

Consequential changes to capital allowance claims under sections 19 and 19A of the SITA for YA 2009 to YA 2013

11. Sections 19 and 19A of the SITA will also be revised<sup>3</sup> to mirror the relaxation of the “trade or business” conditions provided under sections 14D and 14E.
12. In essence, with the above tax change, a taxpayer who incurs capital expenditure during the basis periods for YA 2009 to YA 2013 to acquire plant and machinery to be used for qualifying R&D activities conducted in Singapore is also eligible to claim capital allowances (other than a 100% write-off) on the plant and machinery acquired, whether or not the R&D undertaken relates to the trade or business he carries on. The revised treatment also applies to capital expenditure incurred by the taxpayer<sup>4</sup> during the basis periods for YA 2009 to YA 2013 to acquire plant and machinery for use by an R&D organization which carries out qualifying R&D activities in Singapore on his behalf.
13. The manner capital allowances will be made to a taxpayer following the above tax change is explained below.

Set-off of capital allowance in respect of expenditure incurred to acquire plant and machinery to be used for R&D activities

14. A taxpayer who acquires plant and machinery for use in R&D activities relating to his trade or business should continue to claim the capital allowance on such plant and machinery against income derived from that trade or business.
15. Where the taxpayer also acquires plant and machinery for use in R&D activities conducted in Singapore which is not related to his trade or business, he can claim the capital allowance on such plant and machinery against any normal income he derives. Where he concurrently derives both normal and concessionary income and his normal income cannot sufficiently absorb the capital allowance, the excess capital allowance is treated as an unutilized capital allowance in respect of his normal income activities and is available for set-off against his concessionary income in accordance with section 37B of the SITA.
16. Where a taxpayer derives only concessionary income that is subject to tax at one or more concessionary tax rates, and acquires plant and machinery for R&D activities that are not related to his trade or business, the corresponding capital allowance is allowed against income from his

---

<sup>3</sup> The revised sections 19 and 19A are provided in the 2008 Income Tax (Amendment) Bill.

<sup>4</sup> Ownership of the plant and machinery must be retained by the taxpayer.

trade or business that is subject to tax at the highest concessionary tax rate, after applying the following formula:-

$$B \times \frac{\text{Prevailing Corporate Tax Rate}}{\text{Highest Concessionary Tax Rate}}$$

Where B is the total amount of capital allowance claimable under sections 19 and 19A of the SITA, in respect of the plant and machinery acquired for R&D activities that are not related to the taxpayer's trade or business.

17. If the concessionary income subject to tax at the highest concessionary rate referred to in paragraph 16 is not sufficient to fully absorb the capital allowance, the excess capital allowance is treated as part of the unutilized capital allowance for the trade or business from which the concessionary income is derived and is available for set-off against any other concessionary income in accordance with section 37B of the SITA.

#### Balancing Adjustments

18. Consequent to the above changes to the capital allowance regime, section 20 of the SITA will also be amended<sup>5</sup> to require a taxpayer to compute balancing adjustments on plant and machinery the taxpayer acquires for use in R&D activities conducted in Singapore which is unrelated to the trade or business carried on by him, under the following circumstances:
  - (a) the plant and machinery ceases to belong to the taxpayer (e.g. in the event of a sale); or
  - (b) the plant and machinery continues to belong to the taxpayer but the plant and machinery;
    - (i) permanently ceases to be used by the taxpayer, or by any R&D organization on his behalf, for an R&D activity in Singapore; and
    - (ii) is not subsequently put to use in the taxpayer's trade of business; or
  - (c) the plant and machinery, if it had been put to use by the taxpayer for its trade or business after ceasing to be used for an R&D activity in Singapore, either;
    - (i) subsequently ceases to belong to the taxpayer; or
    - (ii) subsequently permanently ceases to be used for his trade or business.

---

<sup>5</sup> The revised section 20 is provided in the 2008 Income Tax (Amendment) Bill.

### Balancing Allowance

19. Where a balancing allowance arises from the disposal of plant and machinery used by a taxpayer for non-trade related qualifying R&D activities in Singapore, the balancing allowance can be offset against income derived by the taxpayer in the same manner described in paragraphs 14 to 17 above for capital allowances.

### Balancing Charge

20. Where the disposal of such plant & machinery by the taxpayer results in a balancing charge, the balancing charge shall be treated as income in the hands of the taxpayer and brought to tax at the prevailing corporate tax rate.
21. Examples are given in Annex B-1 to illustrate the manner of set-off of capital allowance for such plant & machinery.

### ***(II) Enhanced Deduction Under New Section 14DA***

22. Before the liberalization, a taxpayer can claim deduction equal to 100% of the expenditure he incurs to undertake R&D, whether or not the R&D activities are carried on in Singapore.
23. With the liberalization, a taxpayer who incurs qualifying expenditure on qualifying R&D activities conducted in Singapore during the basis periods for YA 2009 to YA 2013 can also claim a further deduction of up to 50% of the expenditure.
24. The enhanced deduction is given over and above the deduction currently allowable under section 14D of the SITA. A new section, section 14DA, will be enacted to give effect to the further deduction<sup>6</sup>.
25. The further deduction under section 14DA is granted with the objective of encouraging pervasive R&D in Singapore. It is therefore granted only for expenditure incurred by a taxpayer in connection with qualifying R&D activities actually carried out in Singapore. The qualifying R&D activities may however be undertaken by the taxpayer directly or outsourced by him to an R&D organization that undertakes the R&D activities in Singapore.
26. Expenditure incurred by a taxpayer for R&D activities performed outside Singapore will not qualify for the further deduction granted under section 14DA.

---

<sup>6</sup> New section 14DA has been incorporated in the 2008 Income Tax (Amendment) Bill.

## Qualifying R&D Expenditure

27. The following types of expenditure incurred in connection with qualifying R&D activities carried out in Singapore (“qualifying R&D expenditure”) are eligible for further tax deduction under section 14DA:
- (a) staff costs (excluding directors’ fees);
  - (b) consumables; or
  - (c) any other item of expenditure on qualifying R&D activities which the Minister for Finance may prescribe by Regulations.

The scope of staff costs and consumables eligible for further tax deduction under section 14DA is further explained in paragraph 33.

28. Where a taxpayer directly carries out qualifying R&D activities in Singapore, he can claim further deduction under section 14DA equal to 50% of the amount of qualifying R&D expenditure incurred. This is in addition to the 100% deduction he can claim under section 14D for such expenditure.
29. Where a taxpayer contracts with an R&D organization to undertake on his behalf qualifying R&D activities in Singapore, he can claim further deduction under section 14DA on the sum payable to the R&D organization during the relevant basis period(s). The further deduction is however limited to the extent the sum payable relates to the qualifying R&D expenditure mentioned in paragraph 27 and is also a deduction currently allowable under section 14D.
30. A taxpayer who contracts with an R&D organization to undertake qualifying R&D activities on his behalf may not always be in the position to require the R&D organization to provide a breakdown of expenditure items incurred by the organization<sup>7</sup>. If so, the taxpayer would not be able to identify and determine the amount of qualifying R&D expenditure incurred based on sums invoiced by the R&D organization. In such cases, the taxpayer will be granted a further deduction under section 14DA based on 30%<sup>8</sup> of the sums payable to the R&D organization for R&D services provided during the relevant basis period(s).

---

<sup>7</sup> For example, the R&D organization may not be willing to provide the breakdown of expenditure items because this will impose on it to reveal its profit margin from providing the R&D services.

<sup>8</sup> When sums are payable by a taxpayer to an R&D organization to undertake qualifying R&D activities in Singapore on the taxpayer’s behalf, and the amount of qualifying R&D expenditure referred to in paragraph 27 cannot be readily identified, the Ministry for Finance has agreed to deem 60% of all sums payable to the R&D organization during the relevant basis period(s) as qualifying R&D expenditure. The further deduction of 30% is arrived at based on 50% of 60% of the sums payable to the R&D organization during the relevant basis period(s).

31. In cases where a taxpayer incurs qualifying expenditure in connection with qualifying R&D activities and the expenditure is fully or partially funded by Government grants or subsidies, the taxpayer is only eligible to claim further deduction on such expenditure under section 14DA net of Government grants or subsidies. In other words, expenditure incurred to undertake qualifying R&D activities in Singapore which is funded by Government grants or subsidies will not be considered qualifying R&D expenditure for the purpose of section 14DA. To illustrate, if a taxpayer incurs \$5,000 to employ a researcher to undertake qualifying R&D activities in Singapore but obtains a \$1,000 subsidy from the Government in this connection, he is considered to have incurred qualifying R&D expenditure of \$4,000 (\$5,000 net of \$1,000 subsidy) which is eligible for further deduction under section 14DA.
32. The example in Annex B-2 illustrates the computation of R&D expenditure deductible under sections 14D and 14DA.

Definition of staff costs, consumables and R&D organization

33. The terms “staff costs”, “consumables” and “R&D organization” have the meanings explained below for the purposes of further tax deduction allowable under section 14DA.

“*Staff costs*” means any salary, wages and other benefits paid or granted in respect of employment (excluding director’s fees), whether in money or otherwise, to any employee for carrying out R&D activities. The costs include training and certification costs in areas of specialization relevant to a qualifying R&D project, as well as airfare and living allowances incurred to sponsor an employee to attend relevant overseas training. Where a staff does not engage in qualifying R&D activities on a full time basis, only that part of the staff costs attributable to the time spent by the staff on the qualifying R&D activities is eligible for the further tax deduction under the section 14DA<sup>9</sup>.

“*Consumables*” means any material or item used in an R&D activity which upon such use, is consumed or transformed in such manner that it is no longer useable in its original form. The term does not include items of expenditure such as utilities, rent and other overheads which may be incurred directly or indirectly in connection with the R&D activity. Examples of consumables are:

- A laboratory chemical which is used up or converted into an unusable product in an R&D process.
- An electronic component that is integrated into a prototype and is no longer available for use for another purpose.

---

<sup>9</sup> A taxpayer should maintain appropriate documentary evidence to support this (e.g. time sheets). Generally, IRAS is prepared to accept time sheets provided by the taxpayer as documentary proof for the time spent by the staff on the qualifying R&D activities. The taxpayer is not required to submit such documentary evidence unless requested by IRAS.

*“R&D Organization”* means a body or an organization which provides R&D services for any trade or business<sup>10</sup>.

## **OTHER DETAILS**

34. Where a taxpayer has acquired any intellectual property rights (IPRs), including those resulting from R&D activities undertaken by him, and subsequently disposes, transfers or otherwise assigns his IPRs for arm’s length consideration, he may realize a gain or a loss from the disposal of the IPRs. The taxability of any such gain or the deductibility of any such loss will depend on the nature of the gain or loss. Generally, if the taxpayer does not engage in acquiring IPRs, or in R&D activities to develop IPRs, for the purpose of sale or disposal in any manner, any gain or loss realized by him on disposal of the IPRs will not be taxable or deductible respectively.
35. Where the taxpayer disposes the IPRs to a related party<sup>11</sup>, the latter who acquires the IPRs will not be eligible to claim writing down allowances under section 19B in respect of the IPRs acquired under the following circumstances:
- (a) the person from whom he acquires the IPRs has been previously allowed tax deduction under section 14, 14D, 14DA, or 14E in respect of any activities which resulted in the creation of the IPRs; and
  - (b) the person from whom he acquires the IPRs is not subject to tax on the proceeds from the sale, transfer or assignment of the IPRs.

## **ADMINISTRATIVE PROCEDURES**

36. Generally, a taxpayer who wishes to claim further tax deduction for qualifying R&D expenditure incurred under section 14DA must make the claim in his income tax return for the relevant YA and submit the completed R&D Claim Form together with his income tax return. A breakdown showing the items of qualifying R&D expenditure incurred during the basis period which qualify for the further tax deduction should be provided with the tax computation submitted.
37. Where a taxpayer has made payments to an R&D organization to undertake qualifying R&D activities in Singapore on his behalf and he

---

<sup>10</sup> For the purposes of sections 14D and 14DA, any taxpayer that performs R&D as one of its activities can be considered an R&D organization. R&D need not be the taxpayer’s principal business activity.

<sup>11</sup> A person is a related party to another if he, directly or indirectly, controls the other person, or is controlled, directly or indirectly, by the other person, or where he and the other person, directly or indirectly, are under the control of a common person.

wishes to claim further tax deduction for expenditure in excess of 60% of any sum payable to the R&D organization, he is required to support his claim with copies of invoices issued by the R&D organization which identify that the amount claimed relates to qualifying R&D expenditure, as explained in paragraphs 27 and 33.

38. A taxpayer who incurs R&D expenditure of at least \$150,000 (net of Government grants and subsidies) is required to provide detailed description of the R&D project undertaken in accordance with the guidelines in Annex E.
39. Other than the above, a taxpayer is not required to submit documentation supporting his claim for further tax deduction under section 14DA when he files his income tax return. The taxpayer should however maintain adequate supporting documentation and provide it to IRAS upon request as part of IRAS' audit or verification process.

**EXAMPLES ILLUSTRATING TAX DEDUCTION & CAPITAL ALLOWANCE CLAIMS IN RESPECT OF QUALIFYING R&D ACTIVITIES THAT ARE NOT RELATED TO TRADE OR BUSINESS CARRIED ON BY TAXPAYER**

Company A undertakes in-house R&D activities that are not related to its trade or business.

In the financial year ended 31 December 2010, Company A incurs qualifying R&D expenditure of \$50,000. In addition, Company A also acquires plant and machinery for use in qualifying R&D activities amounting to \$60,000. The plant and machinery qualifies for a 3-year write-off. Company A also disposes of 2 items of plant and machinery which it acquired for R&D purposes in the previous year. The disposal of the first item of plant and machinery results in a balancing charge of \$5,000, while the disposal of the second item of plant and machinery results in a balancing allowance of \$3,000.

**Example 1: Company A derives both normal and concessionary income**

Company A's R&D expenditure, capital allowance and balancing adjustments, should be reflected in its income tax computation for YA 2011 as follows:

Tax Computation	YA2011	
	\$'000	\$'000
Income	300	120
Less: Non-trade related R&D deduction		
- S14D	50	-
- S14DA (Note 1)	25	-
Other deductible trade expenses	400	50
Adjusted Profit/ (Loss)	(175)	70
Add: Balancing charge on disposal of P&M used for non-trade related R&D	5	-
Less: Capital allowance		
- P&M used for non-trade related R&D (Note 2)	20	-
- Trade related P&M	40	-
- Balancing allowance on disposal of P&M used for non-trade related R&D	3	-
	(233)	70
S37B set-off (Note 3)	39	(70)
Unutilized losses and capital allowances c/f	(194)	-

Note 1: S14DA deduction = 50% x Qualifying R&D expenditure  
= 50% x \$50,000 = \$25,000

Note 2: Capital allowance for P&M used for non-trade related R&D = \$60,000/3  
= \$20,000

Note 3: S37B set-off = \$70,000 x 10%/18% = \$39,000

## Annex B-1 (cont'd)

### Example 2: Company A derives only concessionary income

Company A's R&D expenditure, capital allowance and balancing adjustments should be reflected in its income tax computation for YA 2011 as follows:

Tax Computation	YA 2011		
	\$'000	\$'000	\$'000
	18%	10%	5%
Income	-	300	120
Less: Non-trade related R&D deductions			
- S14D (Note 1)	-	90	-
- S14DA (Note 2)	-	45	-
Other deductible trade expenses	-	400	50
Adjusted Profit/ (Loss)	-	(235)	70
Add: Balancing charge on disposal of P&M used for non-trade related R&D	5	-	-
Less: Capital allowances			
- P&M used for non-trade related R&D (Note 3)	-	36	-
- Trade related P&M	-	40	-
- Balancing allowance on disposal of P&M used for non-trade related R&D (Note 4)	-	5	-
	5	(316)	70
S37B set-off (Note 5)	(5)	44	(70)
Unutilized losses and capital allowances c/f	-	(272)	-

Note 1: Non-trade related R&D expenses = \$50,000.  
R&D expenses regrossed by applying the formula:  
 $A \times (\text{Prevailing Corporate Tax Rate} / \text{Highest Concessionary Tax Rate})$   
=  $\$50,000 \times 18\% / 10\% = \$90,000$ .

Note 2:  $50\% \times \text{qualifying R\&D expenditure} = 50\% \times \$90,000 = \$45,000$ .

Note 3: Capital allowance regrossed by applying the formula:  
 $B \times (\text{Prevailing Corporate Tax Rate} / \text{Highest Concessionary Tax Rate})$   
=  $\$20,000 \times 18\% / 10\% = \$36,000$ .

Note 4: Balancing allowance regrossed by applying the formula:  
 $B \times (\text{Prevailing Corporate Tax Rate} / \text{Highest Concessionary Tax Rate})$   
=  $\$3,000 \times 18\% / 10\% = \$5,000$ .

Note 5: Normal income:  $\$5,000 \times 18\% / 10\% = \$9,000$   
Concessionary income taxed at 5%:  $\$70,000 \times 5\% / 10\% = \$35,000$   
Total S37B set-off =  $\$9,000 + \$35,000 = \$44,000$ .

**EXAMPLE ILLUSTRATING COMPUTATION OF QUANTUM OF QUALIFYING R&D EXPENDITURE ELIGIBLE FOR FURTHER DEDUCTION UNDER SECTION 14D and 14DA**

**Example**

Company B has incurred R&D expenditure totaling \$27M in the financial year ended 31 December 2008.

	\$M
R&D performed in-house in Singapore	
- Staffing costs: \$17M	
- Consumables: \$2M	
- Other R&D costs: \$1M	20
Payments made to an R&D organization in Singapore	
- Staffing costs: \$1.5M	
- Consumables: \$1M	
- Other R&D costs: \$2.5M	5
R&D performed outside Singapore	<u>2</u>
Total R&D expenditure	<u>27</u>

A government grant of \$4M, was received as a subsidy for staffing costs incurred in connection with in-house R&D activities.

The total deduction claimable by Company B under S14D and S14DA in YA 2009 is calculated as follows:-

(i) Deduction claimable under S14D

	\$M
R&D performed in-house in Singapore	20
Payment made to an R&D organization in Singapore	5
R&D performed outside Singapore	<u>2</u>
Total deduction claimable under S14D	<u>27</u>

(ii) Further deduction claimable under S14DA

	\$M
R&D performed in-house in Singapore	
Staffing costs net of government grant: (\$17M - \$4M)	\$13M
Consumables	<u>\$ 2M</u>
Qualifying R&D expenditure	<u>\$15M</u>
S14DA deduction (50% x \$15M)	<u>\$ 7.5M</u>

7.5

**Annex B-2 (cont'd)**

Payment made to an R&D organization in Singapore

Higher of:

(a)  $30\% \times \$5M = \$1.5M$ ; or

(b) Staffing costs:	\$1.5M	
Consumables:	<u>\$1.0M</u>	
Qualifying R&D Expenditure	<u>\$2.5M</u>	1.5

$50\% \times \$2.5M = \$1.25M$

R&D performed outside Singapore	<u>NIL</u>
Total deduction claimable under S14DA	<u><u>9</u></u>

(iii) Total deduction claimable under S14D and S14DA  
= \$27M + \$9M  
= \$36M

## R&D TAX ALLOWANCE SCHEME

### INTRODUCTION

1. The R&D tax allowance scheme is a new incentive scheme targeted at encouraging companies, especially the Small and Medium-Sized Enterprises, which enjoy profitability to engage in R&D activities.
2. Under the scheme, a company that derives chargeable income in any YA falling within the period YA 2009 to YA 2013 (both YAs inclusive) will be granted an R&D tax allowance of up to \$150,000, computed based on 50% of the first \$300,000 of its chargeable income in a YA. Where the company has chargeable income lower than \$300,000 in a YA, the R&D tax allowance will be computed based on 50% of the lower amount of chargeable income.
3. A company, subject to meeting certain qualifying conditions, can make a claim to utilize the R&D tax allowance against the assessable income it derives in subsequent YAs. The last YA in which any R&D allowance granted can be utilized is YA 2016.
4. A new section, section 37G, has been included in the 2008 Income Tax (Amendment) Bill to give effect to the R&D tax allowance scheme.

### COMPUTATION OF AMOUNT OF R&D TAX ALLOWANCE

5. A company that derives chargeable income in a YA falling within the period YA 2009 to YA 2013 (both YAs inclusive) will be granted an R&D tax allowance computed in accordance with the following formula:

$$(A-B-C-D-E) \times 50\%$$

Where:

A is the assessable<sup>12</sup> income of the company for the YA

B is the R&D tax allowance claimed against the assessable income for the YA (if applicable);

---

<sup>12</sup> For the purpose of the R&D tax allowance scheme, the term “assessable income” referred here refers to assessable income of a company as determined under section 37 of the SITA, before deducting any investment allowance under Part X of the Economic Expansion Incentives (Relief from Income Tax) Act and any deductions claimed under sections 37C, 37E and the new section 37G.

C is the amount of investment allowance deducted under Part X of the Economic Expansion Incentives (Relief from Income Tax) Act (Cap. 86) in the YA (if any);

D is the amount of loss items transferred to the company under section 37C of the Singapore Income Tax Act ("SITA") in the YA (if any) and the qualifying deductions carried back under section 37E of the SITA from a subsequent YA to the YA (if any).

E is the amount of chargeable income not charged to tax under section 43(6) or section 43(6A) of the SITA for that YA.

6. The R&D tax allowance computed in accordance with the above formula is subject to a cap of \$150,000 for each YA.

#### Maintenance of R&D Account

7. Where a company has chargeable income for the period YA 2009 to YA 2013 (both YAs inclusive), an R&D tax allowance computed based on the formula stated in paragraph 5 above will be credited to an account known as the "R&D account" on the last day of the relevant basis period.
8. If the total amount of R&D tax allowance computed for a YA and the balance standing in the R&D account on the last day of the basis period for the YA (immediately before any R&D allowance is credited to the R&D account for the YA) exceeds \$450,000, only an amount equal to the difference between \$450,000 and the amount standing in the R&D account on the last day of the basis period for the YA (immediately before any R&D allowance is credited to the R&D account for the YA), will be credited to the R&D account. Any amount in excess of \$450,000 is disregarded and will not be credited to the R&D account in the YA or any subsequent YA.

#### R&D tax allowance granted in respect of concessionary income

9. The R&D tax allowance granted in respect of income taxable at concessionary rate(s) will have the same dollar value as R&D tax allowance granted in respect of income taxed at the normal corporate tax rate. Therefore, only a single R&D account needs to be maintained for a company that is granted R&D tax allowance on both normal and concessionary income.
10. Annex C-1 illustrates the computation of R&D tax allowance creditable to the R&D account in a YA under different situations, including the situation where a company derives income subject to tax at more than one rate of tax.

## UTILIZATION OF R&D TAX ALLOWANCE

11. A company can offset the R&D tax allowance in its R&D account against assessable income derived during the basis periods from YA 2010 to YA 2016 (both YAs inclusive). This is provided that:
- the company has a credit balance in its R&D account on the first day of the basis period for the YA of utilization; and
  - the company has incurred incremental qualifying R&D expenditure in the basis period for the YA.
12. For the purpose of the R&D tax allowance scheme, the amount of incremental qualifying R&D expenditure incurred during the basis period for the YA of utilisation is computed as follows:

		\$
	Qualifying R&D expenditure incurred in basis period for the YA of utilization	XX
Less	Qualifying R&D expenditure incurred in the base year	YY
	Qualifying incremental R&D expenditure	<u>ZZ</u>

Where:

“qualifying R&D expenditure” means any R&D expenditure that:

- qualifies for deduction under section 14D of the SITA;
- is beneficially incurred by a company in respect of R&D activities carried out in Singapore, either directly by the company in-house or outsourced to an R&D organization in Singapore; and
- is not funded by any grant or subsidy from the Singapore Government.

“base year” means:

- in the case of a newly incorporated company whose first YA of incorporation is YA 2009 or later, the basis period for the first YA;
- in all other cases, is the basis period for YA 2008.

Table 1 below provides examples which illustrate the determination of **base year**.

Table 1

Scenario	Base Year
1) Company incorporated on 2 Jan 2007 with its first financial year ending 31 Dec 2007	YA of incorporation: YA 2008 Corresponding basis period: 2 Jan 2007 to 31 Dec 2007
2) Company incorporated on 1 Jul 2006 with its first financial year ending 31 Mar 2007	YA of incorporation: YA 2008 Corresponding basis period: 1 Jul 2006 to 31 Mar 2007
3) Company incorporated on 4 Feb 2008 with its first financial year ending 31 March 2009	YA of incorporation: YA 2009 Corresponding basis period: 4 Feb 2008 to 31 Mar 2008

13. To facilitate the computation of the incremental qualifying R&D expenditure and the eventual R&D tax allowance claims, there is no need to match the qualifying R&D expenditure incurred to the specific trade or business for which the expenditure is incurred or to the applicable tax rates under which the claims would be made. Accordingly, when computing the incremental qualifying R&D expenditure, only two sets of qualifying R&D expenditure need be identified i.e. the amount incurred in the base year and the amount incurred in the basis period for the YA of utilization.
14. Examples are given in Annex C-2 to illustrate the computation of the amount of incremental qualifying R&D expenditure.
15. The amount of R&D tax allowance that a company can deduct from its assessable income in the YA of utilization is based on the lowest of the following amounts:
  - (a) the credit balance in the company's R&D account on the first day of the basis period for the YA;
  - (b) the incremental qualifying R&D expenditure that the company incurs during the basis period for the YA; or
  - (c) the assessable income for the YA.
16. The R&D tax allowance is only first available for offset against the assessable income for the YA immediately following the YA in which the R&D tax allowance is granted. In other words, if the R&D tax allowance

had been credited into the company's R&D account on say, the last day of the basis period for YA 2010, the first YA the company can seek to utilize the R&D tax allowance to offset the assessable income is YA 2011.

17. If the assessable income for the YA immediately following the YA in which the R&D tax allowance is granted is insufficient to absorb the R&D tax allowance granted, the unutilized R&D tax allowance can be carried forward for offset against the assessable income in the next YA and so on.
18. Any amount of the R&D tax allowance used to offset against assessable income in a YA, will be debited from the R&D account.
19. Any balance standing in the R&D account not fully utilized by YA 2016 will be disregarded.
20. Table 2 below summarizes the utilization timeframe for R&D tax allowance.

*Table 2*

YA in which R&D Allowance is granted	1 <sup>st</sup> YA in which R&D Allowance can be utilized	Last YA* to utilize R&D Allowance
2009	2010	2016
2010	2011	2016
2011	2012	2016
2012	2013	2016
2013	2014	2016

\*Note: Any balance that cannot be utilized by this YA will be disregarded

21. Any claim for the R&D tax allowance need not be identified against the source of income in respect of which R&D tax allowance is granted. This is because the balance standing in the R&D account can be utilized against assessable income derived by the company from any source.
22. Where a company derives income that is subject to tax at more than one tax rate, the company should first offset the R&D tax allowance against the income that is subject to tax at the highest tax rate, and any balance remaining should then be offset against the next lower tax rate and so on. This order of set-off above will confer maximum tax benefit to a company which derives income that is subject to different tax rates.
23. Examples are given in Annex C-3 to illustrate the utilization and order of set-off of R&D tax allowance.

### Unutilized R&D tax allowance not available for transfer out or carry back

24. Any R&D tax allowance that is not utilized by a company in a YA will not form part of its tax losses for the YA. Consequently, any unutilized R&D tax allowance is also not eligible for transfer among related companies under the group relief system or for carry back to a previous YA under the loss carry back system.

## **ADMINISTRATIVE PROCEDURES**

### Maintenance of R&D account

25. A company is required to maintain records of the R&D tax allowance claimable. There is no need for the company to provide supporting documentation if it is not utilizing its R&D tax allowance.
26. IRAS will not issue an annual statement to a company to confirm the balance available in its R&D account. Instead, a new e-Service will be introduced for companies to view their R&D account balances via *myTax Portal*. For the purpose of the new e-Service, the amount of R&D tax allowance creditable into the R&D account will be based on the finalized or provisionally finalized chargeable income for YA 2009 to YA 2013.

### Declaration of base year and base expenditure

27. In determining the amount of incremental qualifying R&D expenditure incurred, a company must first ascertain the amount of qualifying R&D expenditure incurred in the base year (i.e. base expenditure). The company is required to declare its base year and base expenditure via the new e-Service mentioned above.

### Utilization of R&D tax allowance

28. A company which wishes to utilize its R&D tax allowance for offset against its assessable income in a YA from YA 2010 to YA 2016 (both YAs inclusive) must submit the R&D Claim Form together with its annual income tax return for the YA. The following must also be included in the tax computation submitted:
  - (a) a breakdown of the R&D expenditure incurred during the basis period, highlighting items of expenditure qualifying for the further tax deduction under section 14DA, where applicable (please refer to paragraphs 27 to 33 of Annex B); and
  - (b) a computation of the R&D tax allowance utilized against its assessable income.

29. Where a company incurs expenditure of at least \$150,000 (net of Government grants and subsidies) on qualifying R&D projects, the company is required to provide detailed project descriptions in accordance with guidelines provided in Annex E.
30. Although there is no need for a company to submit supporting documentation together with the income tax return, the company is still required to maintain adequate supporting documentation and provide them to IRAS upon request as part of IRAS' audit or verification process.

Launch of new e-Service

31. IRAS targets to release the new e-Service mentioned in paragraph 26 by April 2009. Further update on this new e-Service will be provided in IRAS website.

## EXAMPLES ILLUSTRATING COMPUTATION OF R&D TAX ALLOWANCE CREDITABLE TO R&D ACCOUNT

### Example 1

Company A derives income that is subject to single rate of tax.

<b>Tax Computation</b>	<b>YA 2009</b>
	\$
Adjusted profit/ (loss)	579,950
Add: Other Income	
Interest Income	100,000
	<u>679,950</u>
Less: Unabsorbed CA b/f	5,500
Current year CA	50,000
Unabsorbed losses b/f	10,000
Donations b/f	-
Current year donations	10,500
	<u>603,950</u>
Less: R&D tax allowance utilized (Note 1)	-
Investment Allowance	55,200
Group Relief transferred in	100,000
Loss Carry-Back Relief utilized	-
	<u>448,750</u>
Chargeable income before exempt amount	448,750
Less: Exempt amount	152,500
Chargeable income after exempt amount	(A) <u><u>296,250</u></u>
A x 50%	<u><u>148,125</u></u>

<b>R&amp;D Account (Company A)</b>	<b>YA 2009</b>
	\$
R&D tax allowance b/f	-
Less: R&D tax allowance utilized	-
Add: Current year R&D tax allowance	148,125
R&D tax allowance c/f	<u><u>148,125</u></u>

Note 1: The first YA in which R&D tax allowance can be utilized is YA 2010.

**Example 2**

Company B derives income that is subject to tax at more than one rate of tax.

**Tax Computation**

	<b>YA 2009</b>		
	\$ 18%	\$ 10%	
Adjusted profit/ (loss)	579,950	475,000	
Add: Other Income			
Interest Income	100,000	55,000	
	<u>679,950</u>	<u>530,000</u>	
Less: Unabsorbed CA b/f	5,500	-	
Current year CA	50,000	55,700	
Unabsorbed losses b/f	10,000	-	
Donations b/f	-	-	
Current year donations	10,500	10,500	
	<u>603,950</u>	<u>463,800</u>	
Less: R&D tax allowance utilized	-	-	
Investment Allowance	55,200	125,000	
Group Relief transferred in	100,000	85,000	
Loss Carry-Back Relief utilized	-	-	
Chargeable income before exempt amount	<u>448,750</u>	<u>253,800</u>	
Less: Exempt amount	152,500	-	
Chargeable income after exempt amount (A)	<u><u>296,250</u></u>	<u><u>253,800</u></u>	
			Total
A x 50%	<u>148,125</u>	<u>126,900</u>	<u>275,025</u>
R&D tax allowance credited to R&D Account			<u>150,000</u> (capped)

**R&D Account (Company B)****YA 2009**

	\$
R&D tax allowance b/f	-
Less: R&D tax allowance Utilized	-
Add: Current year R&D tax allowance	<u>150,000</u>
R&D tax allowance c/f	<u><u>150,000</u></u>

## Notes:

- 1) The first YA in which R&D tax allowance can be utilized is YA 2010.
- 2) R&D tax allowance granted in respect of income taxed at 10% will be accorded the same dollar value as RDA granted in respect of income taxed at 18%.

**Example 3**Capping of R&D Account balance at \$450,000

Company C has an opening balance of \$420,000 standing in its R&D account on the first day of the basis period for YA 2012.

Company C is unable to utilize any part of the above balance in YA 2012, as it has not incurred any qualifying incremental R&D expenditure in the basis period for YA 2012.

Company C derives a chargeable income after partial tax exemption of \$516,300 in YA 2012, computed in the income tax computation as follows:

<b>Tax Computation</b>	<b>YA 2012</b>
	\$
Adjusted profit/ (loss)	839,950
Add: Other Income	
Interest Income	80,000
	<u>919,950</u>
Less: Unabsorbed CA b/f	-
Current year CA	55,200
Unabsorbed losses b/f	-
Donations b/f	-
Current year donations	10,500
Assessable income	<u>854,250</u>
Less: R&D tax allowance utilized	-
Investment Allowance	65,450
Group Relief transferred in	120,000
Loss Carry-Back Relief utilized	-
Chargeable income before exempt amount	<u>668,800</u>
Less: Exempt amount	152,500
Chargeable income after exempt amount (A)	<u><u>516,300</u></u>

The R&D tax allowance granted to Company C in YA 2012 is computed as follows:-

$$50\% \times A = \$258,150$$

Maximum R&D tax allowance claimable in any YA = \$150,000 (capped)

R&D tax allowance granted in YA 2012 = \$30,000 (\$450,000 - \$420,000)

The remaining R&D tax allowance of \$120,000 (\$150,000 - \$30,000) will be disregarded and cannot be credited to the R&D account in any subsequent year.

**Annex C-1 (cont'd)**

<b>R&amp;D Account (Company C)</b>	<b>YA 2012</b>
	\$
R&D tax allowance b/f	420,000
Less: R&D tax allowance Utilized	-
Add: Current year R&D tax allowance	<u>30,000</u>
R&D tax allowance c/f	<u>450,000</u>

**Example 4**

If Company C in example 3 above were to have an opening balance of \$450,000 in its R&D account instead, no further R&D tax allowance will be granted to the company in YA 2012. This is the case even though Company C derives a chargeable income after partial tax exemption of \$516,300 in YA 2012.

<b>R&amp;D Account (Company C)</b>	<b>YA 2012</b>
	\$
R&D Allowance b/f	450,000
Less: R&D Allowance Utilized	-
Add: Current year R&D Allowance	<u>-</u>
R&D Allowance c/f	<u>450,000</u>

The entire R&D tax allowance of \$150,000 computed for YA 2012 will be disregarded and cannot be credited to the R&D account in subsequent years.

## EXAMPLES ILLUSTRATING COMPUTATION OF INCREMENTAL QUALIFYING R&D EXPENDITURE

Qualifying R&D expenditure incurred in base year in respect of a trade or business is different from qualifying R&D expenditure incurred in the basis period of YA of utilization

### Example 1

	18%	
	\$	
Qualifying R&D expenditure		
Incurred in YA of utilization (YA 2010)	500,000	Trade A
Incurred in base year	(100,000)	Trade B
Incremental R&D for YA 2010	<u>400,000</u>	

Assessable income against which base year qualifying R&D expenditure is claimed need not be subject to the same tax rate as the income against which qualifying R&D expenditure is claimed in the YA of utilization

### Example 2

	18%	10%	Total
	\$	\$	\$
Qualifying R&D expenditure			
Incurred in YA of utilization (YA 2010)	500,000	-	500,000
Incurred in base year	-	(100,000)	(100,000)
Incremental R&D for YA 2010			<u>400,000</u>

### Example 3

	18%	10%	Total
	\$	\$	\$
Qualifying R&D expenditure			
Incurred in YA of utilization (YA 2010)	400,000	100,000	500,000
Incurred in base year	(40,000)	(60,000)	(100,000)
Incremental R&D for YA 2010			<u>400,000</u>

**EXAMPLES ILLUSTRATING UTILIZATION OF R&D TAX ALLOWANCE**

Scenario: Company derives income that is subject to tax at a single tax rate

**Example 1**

Company A has a balance of \$148,125 in its R&D account on the first day of the basis period for YA2010, and has incurred incremental qualifying R&D expenditure of \$400,000 for YA2010.

The amount of R&D tax allowance that Company A can utilize against its assessable income for YA 2010 is \$124,500, determined based on the lowest of the following amounts:-

- (a) the credit balance in the company's R&D account on the first day of that basis period of \$148,125;
- (b) the incremental qualifying R&D expenditure that the company incurs in the basis period for YA 2010 of \$400,000;
- (c) the assessable income for that YA of \$124,500.

<b>Tax Computation</b>	<b>YA 2010</b>
	<b>18%</b>
	<b>\$</b>
Adjusted profit/ (loss)	250,000
Add: Other Income	
Interest Income	35,000
	285,000
Less: Unabsorbed CA b/f	-
Current year CA	150,000
Unabsorbed losses b/f	-
Donations b/f	-
Current year donations	10,500
Assessable income	124,500
Less: R&D tax allowance utilized	124,500
Investment Allowance	-
Group Relief transferred in	-
Loss Carry-Back Relief utilized	-
Chargeable income before exempt amount	-
Less: Exempt Amount	-
Chargeable income after exempt amount (A)	-
Tax payable at 18%	-

R&D Account	YA2010
	\$
R&D tax allowance b/f	148,125
Less: R&D tax allowance utilized	(124,500)
Add: Current year R&D tax allowance (Note 1)	<u>-</u>
R&D tax allowance c/f	<u><u>23,625</u></u>

Note 1:  $50\% \times A = 50\% \times 0$   
 $= 0$

Current year R&D tax allowance = NIL

Scenario: Company derives income that is subject to tax at more than one tax rate

### Example 2

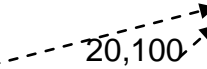
Company B has a balance of \$150,000 in its R&D account on the first day of the basis period for YA 2010, and has incurred incremental R&D expenditure of \$400,000 for YA 2010.

The amount of R&D tax allowance that Company B can utilize against its assessable income in YA 2010 is \$150,000, determined based on the lowest of the following amounts:-

- (a) the credit balance in the company's R&D account on the first day of that basis period of \$150,000;
- (b) the incremental qualifying R&D expenditure that the company incurs in the basis period for YA 2010 of \$400,000;
- (c) the assessable income for that YA of \$890,150 (\$129,900 + \$760,250).

### Annex C-3 (cont'd)

Company B's income tax computation for YA 2010 is as follows:-

YA2010	18%	10%	
	\$	\$	
Adjusted profit/ (loss)	180,000	790,000	
Add: Other Income			
Interest Income	24,000	26,000	
	<u>204,000</u>	<u>816,000</u>	
Less: Unabsorbed CA b/f	-	-	
Current year CA	63,600	45,250	
Unabsorbed losses b/f	-	-	
Donations b/f	-	-	
Current year donations	10,500	10,500	
Assessable income	<u>129,900</u>	<u>760,250</u>	
Less: R&D tax allowance utilized	129,900	20,100	 <p>R&amp;D tax allowance of \$150,000 is first offset against assessable income that is subject to tax at the higher rate, to the maximum extent possible, and the balance is offset against income subject to tax at the next lower rate.</p>
Investment Allowance	-	35,350	
Group Relief transferred in	-	104,900	
Loss Carry-Back Relief utilized	-	-	
Chargeable income before exempt amount	<u>-</u>	<u>599,900</u>	
Less: Exempt amount	-	-	
Chargeable income after exempt amount (A)	<u>-</u>	<u>599,900</u>	
Tax payable	<u>-</u>	<u>59,990.00</u>	

R&D Account	YA 2010
	\$
R&D tax allowance b/f	150,000
Less: R&D tax allowance utilized (ie. 129,900 + 20,100)	(150,000)
Add: Current year R&D tax allowance (Note 2)	<u>150,000</u>
R&D tax allowance c/f	<u>150,000</u>

Note 2:  $50\% \times A = 50\% \times 599,900$   
 $= 299,950$

Current year R&D tax allowance capped at \$150,000.

## **R&D INCENTIVE SCHEME FOR START-UP ENTERPRISES (RISE) - CASH GRANTS FOR TAX LOSSES OF START-UP ENTERPRISES**

### **INTRODUCTION**

1. Turning R&D into marketable products usually takes time. During this period, new start-up companies may not derive taxable profits and therefore cannot avail themselves of the R&D Tax Allowance scheme as described in Annex C of this Circular.
2. The RISE scheme provides qualifying R&D-intensive start-up companies with cash flow assistance. Companies can convert current year unutilized tax adjusted losses incurred in their first 3 Years of Assessment (“YA”) of incorporation into cash grants of up to \$20,250 for each YA subject to certain conditions.
3. The current year unutilized tax adjusted losses for a YA refer to the residue of trading loss incurred in the basis period for the YA of claim which cannot be fully absorbed by statutory income derived in the same basis period.
4. A new section, section 37H, has been included in the 2008 Income Tax (Amendment) Bill to give effect to the operation of the RISE scheme.

### **GENERAL CONDITIONS TO QUALIFY FOR CASH GRANTS**

5. A qualifying start-up company can elect to convert its current year unutilized tax adjusted losses for a YA into a cash grant if the following conditions are satisfied:
  - (a) the YA in which the cash grant is claimed relates to the company’s first 3 YAs since incorporation, and falls within the period YA 2009 to YA 2013 (both YAs inclusive)<sup>13</sup>;
  - (b) the company has incurred qualifying R&D expenditure of at least \$150,000 (comprising in-house and outsourced R&D expenditure) in the basis period for the YA of claim;
  - (c) if the company has already commenced business, the company must have sustained current year unutilized tax adjusted losses in the basis period for the YA of claim;

---

<sup>13</sup> A company will not be eligible for the RISE scheme for any of its first 3 YAs of incorporation that fall outside the period YA 2009 to YA 2013.

- (d) the company must still be carrying on the qualifying R&D activities in Singapore at the time the application for the cash grant is filed with IRAS.
6. The terms “qualifying new start-up company” and “qualifying R&D expenditure” referred to in paragraph 4 are explained below.

Qualifying start-up company

7. For the purpose of the RISE scheme, a qualifying start-up company refers to a company that:
- (a) is incorporated in Singapore;
  - (b) is tax resident of Singapore;
  - (c) has at least one of its first three YAs falling within the period YA 2009 to YA 2013 (both YAs inclusive);
  - (d) has total share capital which is beneficially held, directly by no more than 20 persons –
    - (1) all of whom are individuals, or
    - (2) of which at least one is an individual shareholder holding at least 10% of total number of issued ordinary shares,throughout the basis period for the YA of claim.

Qualifying R&D Expenditure

8. For the purpose of the RISE scheme, qualifying R&D expenditure means any R&D expenditure that:
- (a) qualifies for tax deduction under section 14D of the Singapore Income Tax Act (“SITA”);
  - (b) is beneficially incurred by the company in respect of R&D activities carried out in Singapore, either directly by the company in-house or outsourced to a R&D organization in Singapore; and
  - (c) is not funded by any grant or subsidy from the Singapore Government<sup>14</sup>.

---

<sup>14</sup> Where any item of expenditure is funded fully or in part by a government grant or subsidy, only the amount of expenditure after deducting the government grant or subsidy is considered to be qualifying R&D expenditure.

## COMPUTATION OF CASH GRANT

9. The cash grant is computed as follows:

$$A \times 9\%^{15}$$

Where A is:

- (a) in the case of a qualifying start-up company that has not commenced any trade or business, the lower of –
  - (i) an amount equivalent to the total amount of deductions that would have been claimable under sections 14D and 14DA of the SITA<sup>16</sup> if the company had commenced business in the current YA, or
  - (ii) an amount of \$225,000<sup>17</sup>;
- (b) in the case of a qualifying start-up company that has commenced any trade or business, the lowest of –
  - (i) the current year unutilized tax adjusted loss incurred in the basis period for the YA of claim;
  - (ii) an amount equivalent to the total amount of deductions claimable<sup>4</sup> under sections 14D and 14DA of the SITA; or
  - (iii) an amount of \$225,000<sup>5</sup>.

## CARRY FORWARD OF UNUTILIZED TAX ADJUSTED LOSSES

10. When the current year unutilized tax adjusted losses relating to qualifying R&D expenditure incurred is converted into a cash grant in a YA, the unutilized tax adjusted losses available for carry forward in that YA shall be reduced by the amount of tax adjusted losses converted.

---

<sup>15</sup> The 9% rate is equivalent to the effective marginal tax rate for companies with chargeable income between \$10,000 and \$300,000 (taking into account the prevailing partial tax exemption of 50% for that chargeable income range). The 9% rate is applicable regardless of whether the qualifying start-up company has been awarded any tax incentive and its income, if it arises, would have been exempt or subject to tax at a concessionary tax rate.

<sup>16</sup> For the purpose of computing the R&D cash grant, the total amount of deductions claimable under sections 14D and 14DA of the SITA must relate to qualifying R&D expenditure incurred in the basis period relating to the YA of claim.

<sup>17</sup> The maximum amount of tax adjusted loss relating to qualifying R&D expenditure that may be converted into a cash grant is \$225,000 (i.e. based on \$150,000 x 150%).

11. If the qualifying start-up company has not commenced its trade or business, the amount of R&D expenditure deemed under section 14D(2) of the SITA to have been incurred by it on the first day its trade or business commences shall be reduced by the aggregate amount of qualifying R&D expenditure which had been used to convert into cash grants in prior YAs.
12. If a qualifying start-up company chooses not to convert its unutilized tax adjusted losses into a cash grant, then its losses can be carried forward and used against its profits in subsequent YAs as provided in the SITA. In cases where a qualifying start-up company has not commenced its trade or business, the full amount of qualifying R&D expenditure incurred by the company is deemed under section 14D(2) of the SITA to have been incurred on the first day its trade or business commences.
13. Examples are given in Annex D-1 to illustrate the computation of the R&D cash grant and the effects of making an election to convert current year unutilized tax adjusted losses into an R&D cash grant.

#### **ADMINISTRATIVE PROCEDURES FOR CLAIMING R&D CASH GRANTS**

14. The election made by a qualifying start-up company to convert current year unutilized tax adjusted losses into R&D cash grant is final and irrevocable. Once an election is made, all current year unutilized tax adjusted losses available for conversion in a given YA must be converted to cash grant. Partial conversion of such losses is not allowed.
15. A qualifying start-up company which wishes to convert its current year unutilized tax adjusted losses into a R&D cash grant in a given YA must submit the following together with its annual income tax return for the YA:
  - (a) an R&D Claim Form<sup>18</sup> which includes an undertaking to repay any cash grant recoverable within one month from the notice date;
  - (b) a tax computation showing:
    - a breakdown of the R&D expenditure incurred during the basis period, highlighting items of expenditure that qualify for further tax deduction under section 14DA, where applicable (please refer to paragraphs 27 to 33 of Annex B for this purpose)
    - a computation of the R&D grant which it wishes to claim;
  - (c) a detailed project description of the R&D project undertaken in accordance to the guidelines provided in Annex E; and

---

<sup>18</sup> The R&D Claim Form can be downloaded from [www.iras.gov.sg](http://www.iras.gov.sg).

- (d) audited accounts for the YA.
16. Failure to submit any of the documents mentioned in paragraph 15 above at the time of submission of the company's annual income tax return will disqualify the company from the RISE scheme for that YA.
  17. No other supporting documentation needs to be submitted together with the income tax return. However, the company should maintain its usual accounting records and where relevant, details as reflected in Annex E. IRAS may request for such documents as part of IRAS' audit or verification process.

**EXAMPLES ILLUSTRATING COMPUTATION OF R&D CASH GRANT AND EFFECTS OF ELECTING TO CONVERT CURRENT YEAR UNUTILIZED TAX ADJUSTED LOSSES INTO AN R&D CASH GRANT**

**Example 1**

Company A has commenced business and met all the conditions set out under the RISE scheme to be a qualifying start-up company. Company A incurs qualifying R&D expenditure of \$250,000 in the basis period for YA 2010 and qualifies to claim a R&D cash grant under the RISE scheme in YA 2010.

Company A's income tax computation for YA 2010 and computation of the amount of R&D cash grant it may claim in YA 2010 are as follows:

Tax Computation	YA 2010	
	\$	\$
Adjusted profit/ (loss)		(350,000)
Add: Interest income	15,500	
Less: Unutilized CA b/f	5,000	
Current year CA	17,500	
Unutilized CA c/f	<u>(7,000)</u>	
Less: Current year unutilized tax adjusted losses converted into cash grant		<u>225,000</u> (A)
		(125,000)
Unutilized loss b/f		<u>(18,600)</u>
Unutilized loss c/f		<u><u>(143,600)</u></u>
Unutilized donations b/f		5,000
Current year donations		<u>4,600</u>
Unutilized donations c/f		<u><u>9,600</u></u>

(A) Amount of \$225,000 eligible to be converted to R&D cash grant is determined based on the lowest of the following amounts:

1. the current year unutilized tax adjusted losses for YA 2010 of \$350,000;
2. the amount equivalent to the total amount of deductions claimable under sections 14D and 14DA amounting to \$375,000 i.e. \$250,000 + \$125,000 (based on \$250,000 x 50%); and
3. an amount of \$225,000

$$\begin{aligned} \text{Amount of R\&D cash grant claimable} &= A \times 9\% \\ &= \$225,000 \times 9\% = \$20,250 \end{aligned}$$

**Example 2**

Company B has commenced business and met all the conditions set out under the RISE scheme to be a qualifying company. Company B incurs qualifying R&D expenditure of \$160,000 in the basis period for YA 2010 and qualifies to claim an R&D cash grant under the RISE scheme in YA 2010.

Company B's income tax computation for YA 2010 and computation of the amount of R&D cash grant it may claim in YA 2010 are as follows:

Tax Computation	YA 2010	
	\$	\$
Adjusted profit/ (loss)		(156,000)
Add: Interest income	25,500	
Less: Unutilized CA b/f	5,000	
Current year CA	2,600	
	17,900	
Less: Unutilized loss b/f	5,600	
	12,300	
Unutilized donations b/f	5,000	
Current year donations	4,600	2,700
Current year unutilized loss		(153,300)
Less: Current year unutilized tax adjusted losses converted to cash grant		153,300 (A)
Unutilized loss c/f		-

(A) Amount of \$153,300 eligible to be converted to R&D cash grant is determined based on the lowest of the following amounts:

- (a) the current year unutilized tax adjusted losses for YA 2010 of \$153,300;
- (b) the amount equivalent to the total amount of deductions claimable under sections 14D and 14DA of \$240,000 i.e. \$160,000 + (\$160,000 x 50%); and
- (c) an amount of \$225,000.

$$\begin{aligned}
 \text{Amount of R\&D cash grant claimable} &= A \times 9\% \\
 &= \$153,300 \times 9\% \\
 &= \$13,797
 \end{aligned}$$

**Example 3**

Company C was incorporated on 23 Jun 2008 and commenced business on 8 February 2009. Company C closed its first financial year on 31 December 2009. Company C qualifies to claim R&D cash grant under the RISE scheme for YA 2009 and YA 2010.

Company C 's profit and loss statements for the basis periods ended 31 Dec 2008 and 31 Dec 2009 are as follows:-

	Period ended 31 Dec 2008	Year ended 31 Dec 2009
	\$	\$
Turnover	-	1,450,000
Less: Cost of Goods Sold	-	924,200
Gross profit	-	525,800
Less: Expenses		
Qualifying R&D expenses	300,000	200,000
Other administrative expenses	60,200	150,800
Net profit/ (loss)	(360,200)	175,000

YA2009

Company C has not commenced business in the basis period for YA 2009. The qualifying R&D expenditure of \$300,000 it incurred therefore does not qualify for deduction under sections 14D and 14DA in YA 2009.

Notwithstanding this, Company C can still elect to claim an R&D cash grant in respect of the qualifying R&D expenditure incurred in YA 2009. The amount eligible to be converted to R&D cash grant is the lower of:

- (a) the total amount of deduction that would have been allowable to Company C under sections 14D and 14DA if it had commenced business in YA 2009 amounting to \$450,000 i.e. \$300,000 + (\$300,000 x 50%); and
- (b) an amount of \$225,000

$$\begin{aligned}
 \text{Amount of R\&D cash grant claimable in YA 2009} &= A \times 9\% \\
 &= \$225,000 \times 9\% \\
 &= \$20,250
 \end{aligned}$$

The R&D expenditure incurred by Company C prior to commencement of business net of amount converted into R&D cash grant and deemed as incurred on 8 February 2009 is computed below. The amount shall be available for carry forward and utilization against the profits derived by Company C for subsequent YAs.

**Annex D-1 (cont'd)**

	YA 2009
	\$
Pre-commencement R&D expenditure incurred during the year	300,000
Less: R&D expenditure utilized for R&D cash grant	<u>150,000</u>
Pre-commencement R&D expenditure deemed to be incurred on 8 Feb 09	<u><u>150,000</u></u>

YA 2010

Company C's income tax computation for YA 2010 is as follows:

<b>Tax Computation</b>	<b>YA2010</b>
	\$
Net profit	175,000
Less: S14D deduction for pre-commencement exp. deemed to be incurred on 8 Feb 09	150,000
Less: S14DA deduction for pre-commencement exp. deemed to be incurred on 8 Feb 09 (50% x \$150,000)	75,000
S14DA deduction for current year qualifying R&D exp (50% x \$200,000)	<u>100,000</u>
Adjusted profit/ (loss)	(150,000)
Less: Current year unutilised tax adjusted loss converted to cash	<u>150,000</u>
Unutilised loss c/f	<u><u>-</u></u>

The amount of \$150,000 eligible to be converted to R&D cash grant is determined based on the lowest of the following amounts:

- (a) the current year unutilized tax adjusted losses for YA 2010 of \$150,000;
- (b) the amount equivalent to the total amount of deductions claimable under sections 14D and 14DA of \$300,000 i.e. \$200,000 + \$200,000 x 50%; and
- (c) an amount of \$225,000.

$$\begin{aligned}
 \text{Amount of R\&D cash grant claimable in YA 2010} &= A \times 9\% \\
 &= \$150,000 \times 9\% \\
 &= \$13,500
 \end{aligned}$$

**Project Details**

As a general rule, taxpayers must maintain proposed records of their R&D projects in the event IRAS calls for supporting documents. For the purpose of claiming the new R&D measures, only taxpayers incurring at least S\$150,000 (net of Government grants or subsidies) on R&D projects during the basis period are required to provide detailed project descriptions\* using the guideline below.

**1. Project Objective**

- a. Description of the new knowledge to be acquired or
- b. Description of the materials, devices, products, produce processes to be produced or improved

**2. Project Description**

- a. Innovative or technical content of the project
- b. Technology or knowledge base or level at start of the project
- c. Problems or challenges that could not be readily resolved using information techniques available in the public domain or by a competent professional in the related field

**3. Project Schedule**

- a. Commencement date and (expected) completion date
- b. Projected timeline of major project activities or milestones

**4. Work Done During the Basis Year**

- a. Work done to achieve the scientific or technological objectives stated above
- b. Where all or part of the work is contracted out to R&D organizations, provide the following in respect of each R&D organization:
  - Name
  - Description of work performed
  - Amount paid
  - For R&D organizations located outside Singapore, taxpayers must confirm that
    - i. Any benefit which may arise from the conduct of the R&D shall accrue to the taxpayer (Note: Declaration form available at IRAS website: <http://www.iras.gov.sg/irasHome/page04.aspx?id=8624>, and
    - ii. The R&D expenses were incurred in respect of its trade or business.
- c. Where all or part of the work is performed outside Singapore (other than that performed by an overseas R&D organization), provide the following:
  - Description of work performed
  - Amount incurred
  - Confirmation that the expenses were incurred in respect of the taxpayer's trade or business

**5. Government Grants or Subsidies**

- a. Whether the taxpayer has applied for or received any Government grant or subsidy in relation to the R&D project?
- b. If so, provide a copy of the approval letter together with a breakdown of the R&D expenditure covered by the grant or subsidy.

\* If details have already been submitted in earlier Years of Assessment, let us know the Year of Assessment in which the information was provided and confirm that there is no change in the details furnished. Otherwise, please provide us with an update.