DATE:

ACT : INCOME TAX ACT 58 OF 1962
SECTION : SECTION 11D
SUBJECT : DEDUCTIONS IN RESPECT OF SCIENTIFIC OR TECHNOLOGICAL RESEARCH AND DEVELOPMENT

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Preamble

In this Note unless the context indicates otherwise –

- “API” means active pharmaceutical ingredient;
- “Committee” means the R&D Adjudication Committee as appointed under section 11D(11);
- “Company” means a “company” as defined in section 1(1);
- “Copyright Act” means the Copyright Act 98 of 1978;
- “Designs Act” means the Designs Act 195 of 1993;
- “DST” means the Department of Science and Technology;
- “Guidelines for Good Practice” means the Guidelines for Good Practice in the Conduct of Clinical Trials with Human Participants in South Africa issued by the Department of Health (2006);
- “Minister” means the Minister of Science and Technology;
- “Patents Act” means the Patents Act 57 of 1978;
- “R&D” means research and development;
- “Regulations” refers to Regulation R346 in Government Gazette 38732 of 23 April 2015;
- “Schedule” means a Schedule to the Act;
- “section” means a section of the Act;
- “the Act” means the Income Tax Act 58 of 1962;
- “the Commissioner” includes any employee of SARS who has the delegated power to exercise and perform certain duties;
- “TA Act” means the Tax Administration Act 28 of 2011;
- “WHO” means World Health Organisation;
- “WHO Technical Report” means the WHO Technical Report Series, No. 937, 2006. Annexure 7 Multisource (generic) pharmaceutical products: guidelines on registration requirements to establish interchangeability; and
- any other word or expression bears the meaning ascribed to it in the Act.
All guides and interpretation notes referred to are available on the SARS website at www.sars.gov.za.

1. Purpose

This Note provides guidance on the interpretation and application of section 11D, which contains an incentive to taxpayers carrying on R&D. Amendments to legislation up to 1 January 2015 are taken into account for purposes of this Note.

2. Background

Section 11D was introduced in 2006 to encourage private-sector investment in R&D undertaken within the Republic.

Although the section has undergone many significant changes since its introduction, its purpose remains the same. Important changes introduced from 1 October 2012 are the pre-approval process administered by the DST, the appointment of a Committee and the extension of the mandate of the Committee as discussed in this Note.

Another fundamental change is that the deduction for capital expenditure incurred on any building, machinery, plant, utensil or article used for R&D purposes has been moved from section 11D to sections 12C and 13.

A deduction for R&D expenditure incurred before 1 October 2012 must be sought under section 11D before its amendment. For this purpose, Interpretation Note 50 dated 28 August 2009 is still relevant.

PART A: DEFINITION OF “RESEARCH AND DEVELOPMENT”

3. The law

Section 11D(1)

(1) For the purposes of this section “research and development” means systematic investigative or systematic experimental activities of which the result is uncertain for the purpose of—

   (a) discovering non-obvious scientific or technological knowledge;

   (b) creating or developing—

      (i) an invention as defined in section 2 of the Patents Act;

      (ii) a functional design—

         (aa) as defined in section 1 of the Designs Act, capable of qualifying for registration under section 14 of that Act; and

         (bb) that is innovative in respect of the functional characteristics or intended uses of that functional design

      (iii) a computer program as defined in section 1 of the Copyright Act which is of an innovative nature; or

      (iv) knowledge essential to the use of such invention, functional design or computer program other than creating or developing operating manuals or instruction manuals or documents of a similar nature intended to be utilised in respect of that invention, functional design or computer program subsequent to the research and development being completed; or
(c) making a significant and innovative improvement to any invention, functional
design, computer program or knowledge contemplated in paragraph (a) of (b)
for the purposes of—

(i) new or improved function;
(ii) improvement of performance;
(iii) improvement of reliability; or
(iv) improvement of quality,

of that invention, functional design, computer program or knowledge;

(d) creating or developing a multisource pharmaceutical product, as defined in the
Multisource (generic) pharmaceutical products: guidelines on registration
requirements to establish interchangeability issued by the World Health
Organisation, conforming to such requirements as must be prescribed by
regulations made by the Minister after consultation with the Minister for
Science and Technology; or

(e) conducting a clinical trial as defined in Appendix F of the Guidelines for good
practice in the conduct of clinical trials with human participants in South Africa
issued by the Department of Health (2006), conforming to such requirements
as must be prescribed by regulations made by the Minister after consultation
with the Minister for Science and Technology.

Provided that for the purposes of this definition, research and development does not include
activities for the purpose of—

(a) routine testing, analysis, collection of information or quality control in the
normal course of business;

(b) development of internal business processes unless those internal business
processes are mainly intended for sale or for granting the use or right of use
or permission to use thereof to persons who are not connected persons in
relation to the person carrying on that research and development;

(c) market research, market testing or sales promotion;

(d) social science research, including the arts and humanities;

(e) oil and gas or mineral exploration or prospecting except research and
development carried on to develop technology used for that exploration or
prospecting;

(f) the creation or development of financial instruments or financial products;

(g) the creation or enhancement of trademarks or goodwill; or

(h) any expenditure contemplated in section 11(gB) or (gC).

The definition of “R&D” contains various important concepts and requirements that
will be discussed separately below.
3.1 Systematic experimental or systematic investigative activities (SIE activities),
the results of which are uncertain

The Act does not define SIE activities. In such a case, the words should be interpreted according to their ordinary meaning as applied to the subject matter with regard to which they are used.1 Reliance is often placed on definitions contained in dictionaries or case law to establish the ordinary meaning of a term when no definition has been prescribed in the Act. Words must not, however, be read in the abstract divorced from the broad context in which they are used.2

Since the provisions of section 11D extend privileges to taxpayers, a strict interpretation of the section should be adopted.3 This principle was confirmed in Western Platinum Ltd v C: SARS in which Conradie JA stated the following:4

“The fiscus favours miners and farmers. Miners are permitted to deduct certain categories of capital expenditure from income derived from mining operations. Farmers are permitted to deduct certain defined items of capital expenditure from income derived from farming operations. These are class privileges. In determining their extent, one adopts a strict construction of the empowering legislation. That is the golden rule laid down in Ernst v Commissioner for Inland Revenue 1954 (1) SA 318 (A) at 323C-E and approved in Commissioner for Inland Revenue v D & N Promotions (Pty) Ltd 1995 (2) SA 296 (A) at 305A-B.”

(Emphasis added)

The Oxford Dictionaries5 ascribes the following meanings to the words set out below, namely –

- “systematic” means methodical, structural or organised;
- “investigative” means enquiring into something with a view to expose or find something;
- “experimental” means a scientific procedure undertaken to make a discovery, or to test a hypothesis or to demonstrate a known fact;
- “results” means the outcome of an experiment or activity undertaken; and
- “uncertain” means unknown.

Effect must be given to the meaning of the words contained in the legislation in accordance with the purpose of the legislation whilst also having regard to the context in which the words are contained. In a recent Supreme Court of Appeal judgment,6 the court stated the following:

“Interpretation is the process of attributing meaning to the words used in a document, be it legislation, some other statutory instrument, or contract, having regard to the context provided by reading the particular provision or provisions in the light of the document as a whole and the circumstances attendant upon its coming into existence. Whatever the nature of the document, consideration must be given to the language used in the light of the ordinary rules of grammar and syntax; the

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3 See ITC 1877 (2015) 77 SATC 269 (C) at 281.
4 [2004] 4 All SA 611 (SCA), 67 SATC 1 at 6.
6 Natal Joint Municipal Pension Fund v Endumeni Municipality 2012 (4) SA 593 (SCA). See also C: SARS v Bosch and Another 2015 (2) SA 174 (SCA)
context in which the provision appears; the apparent purpose to which it is directed and the material known to those responsible for its production. Where more than one meaning is possible each possibility must be weighed in the light of all these factors. A sensible meaning is to be preferred to one that leads to insensible or unbusinesslike results or undermines the apparent purpose of the document...The ‘inevitable point of departure is the language of the provision itself’ read in context and having regard to the purpose of the provision and the background to the preparation and production of the document.”

(Emphasis added)

Having regard to the ordinary meaning of the words above in the context in which it is contained, \(^7\) R&D for purposes of section 11D requires a methodical, structured, scientific procedure, or organised enquiry into something with a view to expose or find something, to make a discovery, to test a hypothesis, or to demonstrate a known fact, the outcomes of which are unknown for the purpose of –

- discovering non-obvious scientific or technological knowledge;
- creating or developing –
  - an invention;
  - a functional design;
  - a computer program;
- knowledge essential to the use of such invention, functional design or computer program;
- making a significant improvement to an invention, functional design, computer program or knowledge;
- creating or developing a multisource pharmaceutical trial; or
- conducting a clinical trial.

The proposed activities should be carried out in a detailed methodical and organised manner in the field of science or technology, by means of experiments or analysis with an objective of advancing scientific knowledge or achieving technological advancement and to find something unknown or to discover whether a theory is correct.

It is not sufficient that the SIE activities be generally directed towards advancing scientific or technological knowledge. These SIE activities must be based on principles of an established science, and follow a scientific method.

Experiments are tests undertaken to investigate a proposition about something unknown or previously untested. These experiments need to happen in a methodical and organised manner with records of processes followed and results recorded.

Results are uncertain when the outcome of the objective or how to achieve the objective cannot be known or determined on the basis of current generally available scientific or technological knowledge, information, or experience. The information

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\(^7\) These principles were also confirmed by the Constitutional Court in *Bato Star Fishing (Pty) Ltd v Minister of Environmental Affairs 2004 (7) BCLR 687* that the emerging trend in statutory construction is to have regard to the context in which the words occur, even where the words to be construed are clear and unambiguous.
should not be available in the public domain on a reasonable accessible worldwide basis at the time the experiments are conducted.

If experiments are conducted to confirm what is already known then this requirement is not satisfied. An applicant under section 11D must indicate how it established that the result is uncertain and cannot be known beforehand. This can be done by, among others, conducting literature searches or seeking advice from experts in the field.

Scientific uncertainty exists in basic research or applied research and technological uncertainty exists in experimental development. Recognition of uncertainty is an integral step in the systematic investigation and implies recognition of the need for advancement. The final outcome of the activities must be unknown at the outset.

3.2 Discovery of non-obvious scientific or technological knowledge

The SIE activities must be carried out for the purpose of a discovery of non-obvious scientific or technological knowledge. These terms are also not defined in the Act.

3.2.1 Discovery

Discovery\(^8\) means –

“[t]he action or process of discovering or being discovered”.

According to the Dictionary of Legal Words and Phrases,\(^9\) the word “discovery” as used in the Rhodesian Mining Laws includes the finding of a reef which has been abandoned but it cannot apply to a reef that has already been discovered by someone else.

Having regard to the above definition, a discovery is something that has already been in existence and brought to the discoverer’s awareness. This is usually the ascertaining of an existing fact of nature. An example of this is a researcher conducting genetic sequencing to discover the DNA make-up of a virus (DNA is always in existence but in order to discover its make-up one has to conduct systematic experimentation).

3.2.2 Non-obvious

The scientific or technological knowledge to be discovered must be of such a nature that the outcome cannot be easily determined by a competent professional working in the field using known scientific or technological methods to achieve the intended outcome.

In order for the discovery to be non-obvious, the discovery and the outcome should not be made public anywhere in the world. The non-obvious information should be more than a simple improvement on what is already known or applying existing knowledge in a different setting or location. An applicant bears the onus to indicate what is non-obvious about the discovery of scientific or technological knowledge that will be made. The Minister may take into account, among others, any research or assessment conducted by an expert in the field to make a determination on whether the discovery applied for is in fact non-obvious.

\(^8\) www.oxforddictionaries.com [Accessed 9 January 2017].
3.2.3 Scientific or technological knowledge

The Oxford Dictionaries\textsuperscript{10} defines “scientific” as –

“based on or characterized by the methods and principles of science; Relating to or used in science; or informal Systematic; methodical”.

A “scientific method” is described in the Collins Dictionary\textsuperscript{11} as –

“a method of investigation in which a problem is first identified and observations, experiments, or other relevant data are then used to construct or test hypotheses that purport to solve it”.

Read in context, scientific knowledge is knowledge that is accumulated and acquired through a systematic collection of information or through experimentation which is based on methods or principles of science and applied for the purpose of discovery of something that is not obvious or known anywhere else in the world.

The Oxford Dictionaries\textsuperscript{12} defines “technological” as –

“relating to or using technology”.

According to the Collins Dictionary\textsuperscript{13} “technological” means –

“the application of practical sciences to industry or commerce, or the methods, theory and practices governing such application”.

Technological knowledge therefore refers to the knowledge gained through the application of practical sciences to industry or commerce. It is usually represented in a physical form and is embodied in products or processes.

According to the Frascati Manual\textsuperscript{14}, scientific or technological research can be divided into three categories, namely –

- basic research – theoretical or experimental work done to advance scientific knowledge without a specific practical application or use in mind;
- applied research – original investigation undertaken to advance scientific knowledge with a specific practical application in mind; and
- experimental development – systematic work on knowledge gained from research to achieve technological advancement for the purpose of creating new or significantly improving (including incremental improvements) existing materials, devices, products or processes.

From the above it is apparent that the mere resolution of a technical problem which does not involve basic, applied or experimental development should not qualify as scientific or technological research. A distinction must be drawn between activities aimed at resolving a technological problem and those attempting to overcome a technical uncertainty. This terminology is easily conflated and often used interchangeably in the software environment.

A technical problem is usually resolved by applying existing methods and technology that are well known and not aimed at any scientific or technological advancement.

\textsuperscript{10} www.oxforddictionaries.com [Accessed 9 January 2017].
\textsuperscript{11} www.thecollinsdictionary.com [Accessed 9 January 2017].
\textsuperscript{12} www.oxforddictionaries.com [Accessed 9 January 2017].
\textsuperscript{13} www.thecollinsdictionary.com [Accessed 9 January 2017].
It is sufficient to use known methods and existing technologies to resolve these types of problems and the results or the outcome of the application is known to the person applying such technologies.

A technological uncertainty, however, is not resolved by using existing technologies or methods and the resolution of this uncertainty would require some experimental activities in order to overcome the problem. The results of the activities undertaken to resolve the technological problem must be uncertain and may lead to advancement in the field of technology.

Example 1 – Technical vs technological

Facts:
Company A realises that the software that it currently has is outdated and will need to be upgraded. Company A employs a group of IT professionals to constantly update datasets of the computer systems used to sell its service to the end-user. Whilst Company A is a leader in the market in respect of its software services, the employees are experts in their field and the updating of complex datasets are done without applying new or unknown methods, they use known and existing methodologies to update the datasets. Company A applies under section 11D for the 150% deduction for costs incurred to update these datasets by employing the aforementioned experts.

Result:
Company A will not qualify for the 150% deduction since it failed to demonstrate that the updating of datasets will result in the resolution of a technological uncertainty. The IT technicians will apply known methods and existing technologies to overcome Company A’s technical problems. Company A has a technical and not a technological problem and the results of the activities undertaken by the IT technicians are not uncertain.

The Canadian Revenue Agency\textsuperscript{15} demonstrates the difference between technological and technical problems:

\textbf{“Technical Problems vs. Technological Uncertainties”}

1. Whenever a problem is identified in creating new or improving existing materials, devices, products, or processes, there may be some doubt concerning the way in which it will be solved. This doubt can arise from a technical problem or from a technological uncertainty, so it is important to make a clear distinction between the two. A technical problem is resolved by applying practices, techniques, or methodologies that are known by the company or available in the public domain. In other words, the existing technology base or level is sufficient to resolve technical problems. Overcoming a technical problem will not lead to a technological advancement, although it may lead to the creation of a new or improved product or process. On the other hand, a technological uncertainty cannot be resolved using the existing technology base or level and requires experimental development to resolve the problem.

2. It is important to be able to differentiate experimental development to resolve a technological uncertainty from the use of known tools and techniques to solve a technical problem. To this end, it is helpful to describe the work

\textsuperscript{15}\url{www.cra-arc.gc.ca} [Accessed 9 January 2017].
leading up to the identification of the uncertainty faced. This will help establish (a) why the uncertainty faced could not be resolved on the basis of generally available scientific or technological knowledge or experience and (b) the technology base or level of the company.

3. Furthermore, complexity does not necessarily mean the existence of technological uncertainty. The size and complexity of a project by itself does not justify that the work performed in that project falls within the definition of R&D as defined by section 11D. Likewise, the fact that a large and complex system was developed cannot support the inference that an uncertainty existed. However, a form of technological uncertainty called system uncertainty can arise from or during the integration of technologies, the components of which are generally well known. This is due to unpredictable interactions between the individual components or sub-systems. It may be difficult or impossible to predict how the integrated system will perform due to unforeseeable adverse interactions. The uncertainty here is not in the individual modules or components, but in the modules or components acting as an integrated system. The attempt to resolve these uncertainties by a systematic investigation or search can lead to technological advancement.

4. By its nature, system uncertainty requires that the technological specifications or objectives are such that the basic design of the underlying technologies has to be changed to achieve integration. It is important to be able to distinguish between the work that is done to change the basic design of the underlying technology and the work that does not require the underlying technology to be changed.

Similarly in the South African context, the activities undertaken will constitute R&D only if those activities are aimed at resolving technological or scientific problems, the results of which are uncertain and not overcome by applying existing methodologies that are well known to persons skilled in the art.

3.3 Creating or developing an invention, functional design, computer program or knowledge essential

3.3.1 Invention

A qualifying invention must comply with the definition in section 2 of the Patents Act.

An “invention” is defined in section 2 of the Patents Act as –

“an invention for which a patent may be granted under section 25”.  

Under section 25(1) of the Patents Act, an invention must be new, involve an inventive step and be capable of being used or applied in trade or industry or agriculture.

An invention does not need to be protected by way of a granted patent or be the subject of a patent application for the activity to qualify for a deduction. While there are many reasons why a taxpayer may choose not to apply for patent protection, it is necessary for the work to be protectable by way of a patent. In other words, all the requirements of the Patents Act for an “invention” as defined in that Act must be met but a patent application does not necessarily have to be made.

The requirement that the invention must be “new” implies that the invention has not been made available to the public anywhere in the world (not only South Africa).

See the Annexure for wording of section 25 of the Patents Act.
Public disclosure may take many forms, such as publication, use, written or oral description (section 25(6) of the Patents Act).

Example 2 – New

Facts:
A research team from a South African-resident Company B visits the Democratic Republic of the Congo (DRC) and makes contact with a Congolese healer. The healer has developed a new formula for a lotion which alleviates eczema. The team returns to South Africa with a sample of the lotion and, after some investigation, is able to determine its formula. Company B now wishes to enter the South African market.

Can the cost incurred by Company B for the research conducted in identifying the lotion’s formula qualify as a deduction under section 11D?

Result:
There is no new invention, as the formula is not new. It was manufactured and used in the DRC before it was developed in South Africa, therefore Company B’s activities will not qualify as R&D and the expenditure will not be deductible under section 11D.

The following activities are not considered as inventions capable of registration under the Patents Act:17

- A discovery
- A scientific theory
- A mathematical method
- A literary, dramatic, musical or artistic work or any other aesthetic creation
- A scheme, rule or method for performing a mental act, playing a game or doing business
- A program for a computer
- The presentation of information

Section 25(4) and (11) of the Patents Act also excludes the following from patentability:

- Anything that if published would encourage offensive or immoral behaviour.
- Any non-micro-biological process for the production of animals or plants.
- An invention of a method of treatment of the human or animal body by surgery or therapy or of diagnosis practised on the human or animal body.

3.3.2 Design

Material changes have been effected to section 11D relating to designs. These changes are discussed below with reference to the respective periods to which the different requirements apply.

17 Section 25 of the Patents Act.
October 2012 to January 2014

During this period, the Act referred to any “design” as defined in section 1 of the Designs Act.

A “design” is defined in the Designs Act as –

“an aesthetic or functional design”.

An “aesthetic design” is defined in section 1 of the Designs Act as –

“any design applied to any article, whether for the pattern or the shape or the configuration or the ornamentation thereof, or for any two or more of those purposes, and by whatever means it is applied, having features which appeal to and are judged solely by the eye, irrespective of the aesthetic quality thereof”.

A “functional design” is defined in section 1 of the Designs Act as –

“any design applied to any article, whether for the pattern or the shape or the configuration thereof, or for any two or more of those purposes, and by whatever means it is applied, having features which are necessitated by the function which the article to which the design is applied, is to perform, and includes an integrated circuit topography, a mask work and a series of mask works”.

In order to constitute R&D the applicant must demonstrate that it conducts a systematic investigative or experimental activity, the results of which are uncertain for the purpose of creating or developing either an “aesthetic” or a “functional design” as defined in the Designs Act.

Importantly the design should not be common place and must be new in order to be protectable (section 14 of the Designs Act).

A design, similar to an invention, will be deemed to be new if it is different in form or it does not form part of the state of the art. It is therefore new if it has not been made publicly available anywhere in the world.

The legislation as it stood on 1 October 2012 did not make a distinction between an aesthetic or functional design and an applicant could apply for the R&D incentive for both types of design.

1 January 2014 – 31 December 2014

Section 11D was amended with effect from 1 January 2014\textsuperscript{18} to exclude from the definition of “design”, any aesthetic design and limited the R&D tax incentive to only functional designs.

This means that for the period 1 January 2014 onwards, only a functional design that meets all the requirements of R&D will be eligible for the R&D tax incentive.

1 January 2015 onwards

A further amendment was introduced\textsuperscript{19} into section 11D which limits a deduction of the R&D tax incentive for designs even further. In order to qualify for the tax incentive under a functional design the following requirements must be met:

- It must not be common place

\textsuperscript{18} Taxation Laws Amendment Act 39 of 2013.
\textsuperscript{19} Taxation Laws Amendment Act 43 of 2014.
• It must be new
• It must be innovative in respect of either its functional characteristics or intended uses

It is therefore no longer acceptable for a functional design to just be new and not common place. The functional design must also be innovative (see 3.7) in respect of its functional characteristics or intended uses.

### 3.3.3 Computer programs

Only a “computer program” as defined in the Copyright Act that is innovative will qualify as R&D under section 11D.

A “computer program” is defined in the Copyright Act as –

“a set of instructions fixed or stored in any manner and which, when used directly or indirectly in a computer, directs its operation to bring about a result”.

This definition is very broad. In order for a computer program to qualify as R&D, the following requirements must be met under section 11D(1):

• It must be a “computer program” as defined in the Copyright Act
• The activities related to creating a computer program must be systematic investigative or systematic experimental
• The results of the computer program must be uncertain and unknown
• The computer program must be innovative in nature

According to the Frascati Manual\(^\text{20}\) a computer program will qualify as R&D if its completion is dependent on the development of a scientific or technological advance and the aim of the project is to resolve a scientific or technological uncertainty.

It is expected that the activities related to the creation of a computer program are conducted in a planned logical sequence, and experimentation in the form of a series of testing for the purpose of discovering an unknown result or hypothesis is undertaken. The activities undertaken must be aimed at the resolution of a technological or scientific uncertainty. (See 3.1 and 3.4)

The creation of a computer program must not only be innovative to the applicant’s business, it must be innovative in general and there must be a technological or scientific uncertainty that the computer program intents to resolve.

The innovative requirement was introduced in 2013\(^\text{21}\) and effective from 1 January 2014. This does not mean that for the period 1 October 2012 to 1 January 2014, the innovative requirement was not considered for computer programs since section 11D(9)(a) required R&D to be of an innovative nature. (See 3.7)

The Frascati Manual\(^\text{22}\) provides an indication on the type of software development activities that could be included in R&D. It is, however, not accepted that merely because there is a new algorithm or theorem being developed or created that such computer program will qualify for the R&D incentive. The onus is on the applicant to

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^{21}\) Taxation Laws Amendment Act 39 of 2013  
demonstrate the uncertainty and innovative nature of the software being developed. All the requirements of section 11D(1) must be satisfied.\textsuperscript{23}

A computer program which consists of systematic activity aimed at the resolution of a technical problem by applying practices, techniques and public knowledge which will not resolve a technological uncertainty will not be considered as R&D (see \textbf{3.4} and Example 1).

Expenditure to develop software to support an R&D project may be considered as qualifying R&D expenditure as long as it is directly related to a qualifying R&D project.

\begin{center}
\textbf{Example 3 – Computer program}
\end{center}

\textit{Facts:}

Company A wants to improve its efficiency in customer service. The original software has been developed but it is outdated. Company A employs a group of IT specialists to develop a centralised management platform to manage stock and process orders more efficiently. Company A submits a claim for a deduction under section 11D as the creation of a computer program to claim a 150\% for the expenditure incurred to develop the software.

Will Company A qualify for the R&D incentive for the development or creation of a computer program under section 11D?

\textit{Result:}

No. The program must be innovative. The computer program is not innovative as a centralised management platform to manage stock and process orders more efficiently is not an innovative approach. The software tools used in developing the program is not innovative since it already exists.

\textbf{3.3.4 Knowledge essential}

Under section 11D(1)(a)(ii)(dd) the knowledge is not general knowledge but it must be essential to the use of an invention, design or computer program as envisaged in section 11D(1)(b)(i), (ii) or (iii).

The word “knowledge” bears its ordinary dictionary meaning and is defined in the \textit{Oxford Dictionaries}\textsuperscript{24} as –

“facts, information, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject; what is known in a particular field or in total; facts and information; or awareness or familiarity gained by experience of a fact or situation”.

Operating manuals, induction manuals or documents of a similar nature are excluded.

\textsuperscript{23} Refer to the ICT guidelines published by the Minister: “\textit{Criteria for approving software development and ICT related R&D projects}” Draft Version dated 28 March 2013 accessible at \texttt{www.dst.gov.za}.

\textsuperscript{24} \texttt{www.oxforddictionaries.com} [Accessed 9 January 2017].
Example 4 – Knowledge essential to the use

Facts:
A manufacturing company develops a new machine for manufacturing widgets which is faster than older machines and requires less maintenance. Several parts of the machine are protected by way of registered designs.

While developing the new machine, the manufacturing company develops extensive know-how relating to the operation of the machine and maintenance procedures. The steps, processes and results relating to the design of the parts of the machine as well as the development of the widgets are documented in a research manual. One of the company’s employees spent three months writing a comprehensive operating manual for the machine.

Question 1:
Is the cost of drawing up the operating manual deductible under section 11D?

Question 2:
Is the cost of drawing up the research manual deductible under section 11D?

Result 1:
The cost of drawing up the operating manual is not deductible under section 11D since operating manuals are specifically excluded from the definition of “R&D”.

Result 2:
The research manual will not be excluded from the definition of “R&D”, because it does not constitute an operating manual and forms part of the process of research and development of the machine.

3.4.5 Improvements

Section 11D(1) has been extended to include activities that result in a significant and innovative improvement in any invention, design, computer program or knowledge essential to the use of such discovery or invention as aforementioned. The improvement must relate to –

- a new or improved function;
- improvement of performance;
- improvement of reliability; or
- improvement of quality

of that invention, design, computer program or knowledge.

The taxpayer must conduct methodical investigative or experimental activities which is aimed at resolving a technological or scientific problem, the outcome of which is uncertain at the time that the activities are undertaken.

Applies to expenditure incurred on R&D on or after 1 October 2012 or such later date to be determined by the Minister.
The word “significantly” bears its ordinary meaning and is defined in the *Oxford South African Concise Dictionary*\(^{26}\) as –

“extensive or important enough to merit attention”.

The determination on whether an improvement is significant is a factual enquiry and the onus is on the applicant to demonstrate that the “upgrade” of any scientific or technological invention, design, computer program or knowledge essential to its use results in any improvement as listed above. The significance of the improvement will depend on the extent to which the function, performance, reliability or quality is enhanced, for example, cosmetic changes made to designs will not qualify as an improvement in quality. The applicant must indicate what the effect of the improvement will be or the results that it is intended to yield. An example of this would be to demonstrate the current function and compare it to the intended function after the improvement is made. In other words, the applicant must quantify the difference of the improvement.

Not only must the improvement be significant, it must also be innovative (See 3.7).

### 3.5 Creating or developing a multisource pharmaceutical product

This subsection was inserted in section 11D(1) by Tax Laws Amendment Act\(^ {27}\) during 2014 but applies retrospectively from 1 October 2012. It allows for a deduction for creating or developing a “multisource pharmaceutical product” as defined in the *WHO Technical Report*.

A “multisource pharmaceutical product” is defined in the *WHO Technical Report* as –

“pharmaceutically equivalent or pharmaceutically alternative products that may or may not be therapeutically equivalent. Multisource pharmaceutical products that are therapeutically equivalent are interchangeable”.

From the definition the following products may qualify as multisource pharmaceutical products:

- Pharmaceutically equivalent products
- Pharmaceutically alternative products
- Therapeutically equivalent multisource pharmaceutical products

According to the *WHO Technical Report*, a pharmaceutically equivalent product is a product that is the same with respect to the –

- molar amount;
- active ingredient;
- dosage; and
- administrative route.

When dealing with a pharmaceutically equivalent product, it is important to note that the effects, efficacy and safety of the new product may differ from another product even if administered by the same route and under the same conditions as specified in the labelling of the other product. There may also be differences in the excipients


\(^{27}\) Tax Laws Amendment Act 43 of 2014.
or manufacturing process which may lead to differences in the product performance of the generic being created or developed.

A pharmaceutically alternative product is a product that also contains the same molar amount of the same active ingredient but may differ in form (dosage and/or chemical form). Dosage can be in the form of a tablet or a capsule or a suspension liquid and chemical form refers to different salts or esters for example. These products may or may not be therapeutically equivalent or bioequivalent. In other words the final product may have different effects, safety and efficacy from the original product.

Therapeutic equivalence in a multisource pharmaceutical product happens when two products after administration in the same molar dose produce the same effects with regard to safety and efficacy when administered to patients using the same route and conditions specified in the labelling of the original product.

In addition to the definition contained in the WHO Technical Report, the multisource pharmaceutical product must also comply with the requirements as set out in the Regulations28 prescribed by the Minister of Finance in order to qualify as R&D under section 11D(1). These Regulations stipulate that the multisource pharmaceutical product must contain either of the following requirements:

(1) It must constitute –

(a) any activity in respect of analysis or characterisation of the properties of a pharmaceutical product with the purpose of determining the excipients and other ingredients to be utilised in the formulation of the multisource pharmaceutical product; compatibility tests between the API, excipients and other ingredients; and dosage form design; or

(b) laboratory scale reformulation through experimentation on API, excipients and other ingredients, and pilot plant scale reformulation; or

(c) activities, tests, design and reformulation referred to in (a) and (b); or

(2) It must constitute –

(a) a determination of analytical and stability testing methods if those methods are determined in conjunction with –

(i) the activities, tests and design referred to in (1)(a);

(ii) the reformulation referred to in (1)(b); or

(iii) the activities, tests and design referred to in (1)(a) and the reformulation referred to in (1)(b).

An “API” is defined in the WHO Technical Report as follows:29

“Any substance or mixture of substances intended to be used in the manufacture of a pharmaceutical dosage form, and that, when so used, becomes an active ingredient of that pharmaceutical dosage form. Such substances are intended to furnish pharmacological activity or other direct effect in the diagnosis, cure, mitigation, treatment or prevention of disease, or to affect the structure and function of the body.”


Therefore the development of a novel compound which involves ensuring that there are no adverse interactions with existing APIs by reformulating an existing pharmaceutical product may qualify as R&D if the applicant uses a systematic investigative or experimental methods of which the results are uncertain and unknown to the applicant at the time that the activities are undertaken.

3.6 Conducting a clinical trial

This subsection was inserted in section 11D(1) by Tax Laws Amendment Act during 2014, but applies retrospectively from 1 October 2012. It allows for the conducting of a “clinical trial” as defined in Appendix F of the Guidelines for Good Practice.

Appendix F of the Guidelines for Good Practice defines a “clinical trial” as follows:

“Any investigation in human participants (including patients and other volunteers) intended to discover or verify the clinical, pharmacological and/or other pharmacodynamic effects of an investigational product(s), and/or to identify any adverse reactions to an investigational product(s), and/or to study absorption, distribution, metabolism, and excretion of an investigational product(s) with the object of ascertaining their safety and/or efficacy.

Clinical trials are generally classified into Phases I to IV. It is not possible to draw distinct lines between the phases, and diverging opinions about details and methodology do exist.”

According to the Guidelines for Good Practice, the clinical trials are classified into four phases, and even though there is no clear divide between the phases, a brief description is provided of what each phase of the clinical trials entail.

Phase one involves testing a new active ingredient or formulation on humans. This phase conducts a preliminary evaluation of safety and establishes a first outline of the pharmacokinetic and/or pharmacodynamics profile of the active ingredient in humans. The tests are conducted on healthy persons.

Phase two is performed on a limited number of persons and includes a comparative study (drug vs placebo effect). This phase assesses short-term safety, demonstrates therapeutic activity of the active ingredients and determines the appropriate dosage ranges or regimens. It is also carried out to clarify the dose response relationships in order to provide an optimal background for the design of extensive therapeutic trials. The drug is tested on patients suffering from a disease or condition which the active ingredient is intended to treat.

Phase three is conducted on a larger and varied patient group to determine short-term efficacy and safety balance of formulations of the active ingredient and to assess overall therapeutic value. At this stage a pattern of frequent adverse effects as well as interaction with clinically relevant drugs are investigated and explored. The trial is usually conducted on a randomised double-blind design. The conditions under which the trial is carried out should be as close as possible to the normal conditions of use.

Phase four involves studies that are performed after the product has been marketed. The trial is used to assess the therapeutic value and treatment strategies of the product and to perform post-marketing surveillance. The same ethical and scientific

30 Tax Laws Amendment Act 43 of 2014.
standards applied before marketing must be applied in this phase. The trial is intended to explore new indications, new methods of administration or new combinations of the product.

In addition to the definition contained in the Guidelines for Good Practice, the clinical trial must also meet the requirements as set out in the Regulations. The following activities will not qualify as R&D even if it is carried out in accordance with the Guidelines for Good Practice:

- Phase IV clinical trials that are not intended to develop new indications, new methods of administration or new combinations of pharmaceutical products
- Post-marketing research
- Cost-effectiveness research
- An activity undertaken solely for the purpose of compliance with regulatory requirements
- Product familiarisation programme
- Research carried on for statistical purposes (meta-analysis)
- Epidemiological research
- Research activities undertaken in preparation for the registration of a clinical trial

Importantly, the Guidelines for Good Practice makes reference only to clinical trials conducted on human participants. This reference means that any trial falling outside human clinical trials will not qualify as R&D under section 11D(1)(e). An applicant conducting a trial on any other entity or specie must apply under another subsection of section 11D provided the trial meets the requirements of that subsection and section 11D(6)(a). Feasibility studies will not be considered as part of the expenditure for purposes of the R&D incentive. This is because feasibility studies precede the registration of a clinical trial and the clinical trial only commences after registration and approval.

Similarly, clinical trials that have been completed before an application has been received by the Minister or post ethical procedures that take place after completion of the clinical trial will not qualify for approval as R&D.

Example 5 – Clinical trial conducted and concluded before application approval

Facts:
Company A submits an application for approval of its R&D on 30 September 2013 for expenditure relating to a phase II and III clinical trial undertaken to study the efficacy and safety of a newly-formulated drug. The study has been conducted and completed in August 2013.

32 Above.
Results:
The activities conducted by the applicant meet the requirements of a clinical trial and qualify as R&D under section 11D, however, the application will be rejected on the basis that the clinical trial and the expenditure relating to the clinical trial have been concluded before the date of the application.

Laboratories that provide support services to various companies in the development and approval of new therapeutic agents by simply managing and conducting the laboratory component of clinical trials will not be considered as conducting R&D under section 11D. These support services include but are not limited to analytical testing of clinical samples (pre- or post-), storage of samples used in clinical trials, routine pathology testing and procurement of sites to be used for clinical trials.

Example 6 – Routine activities as a support service to the clinical trial

Facts:
Company A is an independent contract laboratory that provides support services such as pre- and post-analytical and storage facilities for samples to the pharmaceutical industry by managing the laboratory component of clinical trials. Company A applies for approval under section 11D(1)(e) in order to claim 150% of expenditure it incurs to provide this service.

Results:
The activities conducted by the applicant do not meet the requirements for approval as a clinical trial under section 11D(1)(e). The activities of Company A are routine in nature and a support service to the clinical trial, which does not qualify as a clinical trial in itself.

3.7 What is meant by innovative

Section 11D requires innovation in a number of instances. This concept is, however, not defined. Various attempts have been made to give effect to innovation.

The Oxford Dictionaries defines innovative as –
“featuring new methods; advanced and original”.

In order to qualify as an innovative computer program, functional design or improvement to any invention, functional design, computer program or knowledge essential to the use of the latter, the product or process must be original or it must lead to an advancement in the field of science or technology.

In order to qualify as R&D there must be –

- an introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses;
- use of new knowledge or technologies, or new uses or combinations of existing knowledge and technologies;
- significant improvements to existing products through changes in materials, components and other characteristics;

• the implementation of new or significantly improved process including significant changes in techniques, equipment and/or software; or
• an advance in the area of computer software which is new in its application, or novel in the way that it will function or make the computer function.

New knowledge (and its use) is expected to be the outcome of R&D, therefore the nature of innovation considered for purposes of the R&D tax incentive must contain some degree of novelty, not only for the applicant or within the Republic, but worldwide.

Novelty will be assessed by comparing existing stock of knowledge in a reference industry on a worldwide basis. In the case of basic research, research results are codified in scientific publications or patents are checked for absolute novelty. For experimental development activities, reference will be made to specific context where the R&D is performed by taking into account technological uncertainty and technical risk involved in devising new and original application of existing scientific knowledge, as well as new uses of available techniques and technologies.

This will apply equally to improvements and determining whether the improvements are significant and innovative. Obvious processes of imitation, customisation or adaptation which does not expand the state of the art are not novel and therefore will not be considered to be R&D. Activities that use science and technology but does not advance the scientific or technological capability of that product or process will not be regarded as innovative for purposes of R&D. The onus is on the applicant to demonstrate innovation.

3.8 Exclusions

The activities discussed below are specifically excluded from the definition of “R&D” and will not qualify for the 150% deduction under section 11D(2) even if it meets the requirements under section 11D (1) of R&D. The costs associated with these activities may, however, be eligible to be deducted as an expense under section 11(a) as a general deduction.

3.8.1 Routine testing analysis, collection of information or quality control in the normal course of business

Activities undertaken for the purpose of routine testing and analysis or data collection by the taxpayer in the normal course of its business operations are specifically excluded from the definition of “R&D”. Routine testing in the normal course of business is a process that is generally undertaken by a company in its operations. There is no scientific or technological advancement that will result from the testing; it is an application of methods in existing products or processes the outcomes of which are already known.

An example of data collection in the normal course of business is an IT company collecting statistical data (see Example 6). These processes are usually associated with determining the marketability or credibility of the researched product.

Quality control procedures provide assurance that the final product adheres to the minimum standards of production and as a result these processes do not contribute to the R&D. It is often that most of these processes occur after the finalisation of the R&D.
3.8.2 Development of internal business processes

The concept “internal business processes” is not defined.

According to the Oxford Dictionaries, -34

- “internal” means to exist or occur within an organisation;
- “business” is an activity that someone is engaged in; and
- “processes” is a series of actions or steps taken in order to achieve a particular end.

Internal business processes relate to any action or series of actions undertaken within a company in order to achieve a particular outcome and may include activities that make a company more efficient. These internal business processes may be achieved through the use or advancement of computer programs or computer software and not necessarily limited only to issues such as human resources, accounting or administration. This view is supported by the ABC judgment 35 wherein the court had to determine whether a software program developed to enable the customer’s operating systems to interface with the operating systems of government agencies such as SARS Customs Division, the Ports Authority and Airports Company of South Africa to verify data relating to the import and export of goods constituted an internal business process. ABC developed software programs for the use by its customers in freight forwarding, customs clearing agents and cargo transport companies to control the clearance of consignments of goods imported and exported. Although ABC’s customers were using the computer software to render its services to their customers including interfacing with SARS Customs Division and port authorities, the court still found that the software related to an internal business process.

Ndita J emphasised the ordinary meaning of the words “expenditure… relating to” and held as follows:

“The New Oxford Dictionary of English defines the verb ‘relate’ to mean: ‘make or show a connection between’. It defines the noun ‘relation’ to mean: ‘the way in which two or more people or things are connected; a thing’s effect on or relevance to another’. It follows that what is prohibited is expenditure ‘which is connected with’ the items listed in 11D(5) as provided in paragraphs (a) to (e).”

The court confirmed SARS’s view that the management of internal business process is not limited to the taxpayer’s management or internal business processes but it should be extended to include the management or internal business process of the client as well. 36

Note that the judgment, even though only delivered in 2015, related to a year of assessment which preceded the amendment in respect of expenditure relating to internal business processes on 1 October 2012 which subsequently allowed for expenditure relating to internal business process which was intended for sale or would be licensed by the taxpayer. The principles of interpretation contained in the judgment in respect of “expenditure…relating to” and the fact that it is not only limited to the internal business processes of the taxpayer, however, remain relevant.

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35 Case IT13541 – judgment delivered on 21 April 2015.
36 Case IT13541 – judgment delivered on 21 April 2015 at 20.
Example 7 – Internal business process not qualifying as R&D

Facts
Company A is engaged in a bottling activity to earn income. In order to increase revenue and efficiency, it decides to upgrade its bottling process. Company A employs a technical specialist to look into the bottling process and to propose a way to increase the speed of the bottling process in order to produce more stock so that it could reach its customers faster. The technician analyses the process flow and the machines’ capacity and proposes a unique way to use the machinery more efficiently by maintaining the current electricity usage and increasing the output at the same time. This process is specific to Company A in order to manage its resources more effectively.

Result:
The optimal use of Company A’s resources and improving the output merely enhances Company A’s manufacturing process. The process or the research undertaken to improve the bottling process would not be made available for sale or licensed for use by any other person not related to the taxpayer. It constitutes an internal business process and therefore will not qualify for the R&D tax incentive.

The development of websites, internet sales systems, or customer satisfaction questionnaires is accordingly not eligible for the deduction as these constitute internal business processes. Software packages developed for administration, human resources or accounting purposes that are not sold or licenced to persons who are not connected in relation to one another are similarly excluded from the definition of “R&D”.

Internal business processes that are developed mainly for the purpose of sale or licensing to unconnected third parties will not be excluded from R&D.

Example 8 – Computer software to enhance internal business process

Facts:
Company A employs several computer programmers to design computer software which will allow it to have a single view of various applications from one monitor thereby improving the overall customer experience and enhancing its service offering to the client. The right to use the software will be granted to Company B (a sister company of Company A) for a monthly fee in order to recover costs incurred to commission the computer software. The software already exists in the market but the software requires some adaptation in the form of integration with other software applications that exist in the market. The programmers use what is already in the market and integrate these products to create a computer system that improves the back office by enabling the employees to access information on different databases from a single application so that they have an overall view of the results.

Question 1:
Does the development of Company A’s software constitute an R&D purpose and will the expenditure incurred qualify for a deduction under section 11D(1)?
Question 2:
Assuming the software is innovative, does the fact that Company A grants the right of use to Company B change the result in question 1?

Result 1:
The software constitutes a “computer program” as defined in the Copyright Act, however, under the proviso to section 11D(1) the cost of developing and adapting the software will not qualify as a deduction because the software relates to the improvement of the company’s management or internal business processes. Furthermore the results of the activities are certain since the Company A uses existing methods and persons who are skilled in the art of IT to meet its business requirements. Company A does not make any scientific or technological advancement to the computer software and therefore would not be considered as innovative. The activities involve a process that Company A would undertake in the normal course of its business operations in order to improve its own internal efficiencies.

Result 2:
The granting of the right to use to its sister company (Company B) will not change the result since Company A and Company B belong to the same “group of companies” as defined in section 1(1).

Example 9 – Internal business process qualifying as R&D
Facts:
Company Y frequently engages in R&D activities for the development of a software system for use by small businesses. Company Y incurs R200 000 expenses for R&D in respect of the software development. Company Y then licenses the software for recurring use by small business owners.

Result:
Company Y will qualify for the R&D incentive in respect of the R200 000 expenditure incurred for R&D. Despite the fact that the expenditure incurred relates to an internal business process, the software development is dedicated to external exploitation (that is, licence to customers).

3.8.3 Market research, market testing or sales promotion
Activities associated with a project but not directly contributing to the resolution of scientific or technological uncertainty do not constitute eligible R&D. Examples include identifying or researching market niches in which R&D may be beneficial to a company, and the examination of a project’s financial, marketing, and legal aspects.

3.8.4 The social sciences or humanities
Although scientific and systematic investigative methods may be used in social science research, including quantitative and qualitative methods, such research does not qualify for the deduction. Examples of such social sciences include languages and literature, history, philosophy, religion, visual and performing arts (including music), psychology and economics.
3.8.5 Oil and gas or mineral exploration or prospecting

Oil and gas exploration and prospecting are governed by the Tenth Schedule, which contains a special dispensation for all companies undertaking oil and gas exploration and prospecting activities.

Tenth Schedule – Definition of “exploration”, “gas” and “oil”

“exploration” means the acquisition, processing and analysis of geological and geophysical data or the undertaking of activities in verifying the presence or absence of hydrocarbons (up to and including the appraisal phase) conducted for the purpose of determining whether a reservoir is economically feasible to develop.

“gas” means any subsoil combustible gas, consisting primarily of hydrocarbons, other than hydrocarbons converted from bituminous shales or other stratified deposits of solid hydrocarbons.

“oil” means any subsoil combustible liquid consisting primarily of hydrocarbons, other than hydrocarbons converted from bituminous shales or other stratified deposits of solid hydrocarbons.

Below are just a few examples of the benefits that oil or gas companies derive from the Tenth Schedule, namely –

- rate of taxes on taxable income is limited to 28%;
- dividends tax rates are limited to zero percent;
- withholding taxes on interest are limited to zero percent for any loans acquired to fund the expenditure incurred (excluding the acquisition of the oil and gas right);
- capital expenditure actually incurred at 100%; and
- 50% of post-exploration capital expenditure that has been incurred.

Due to the capital intensive investments required by the mining industry before any income is earned from its activities, a special dispensation (class privilege) has been incorporated into the Act under section 15 read with section 36 to allow for deductions against mining income. These deductions include capital expenditure incurred during prospecting and exploration of mineral resources.

Examples of activities excluded from the tax-incentive scheme include the sinking of exploratory drill-holes for geotechnical investigations or to evaluate the mineral resources of a site.

R&D to develop technology used in exploration or prospecting is however not excluded from the definition of “R&D” and these activities may still qualify as R&D under section 11D(1).

3.8.6 The creation or development of financial instruments or financial products

Section 1(1) – Definition of “financial instrument”

“financial instrument” includes—

(a) a loan, advance, debt, bond, debenture, bill, share, promissory note, banker’s acceptance, negotiable certificate of deposit, deposit with a financial institution, a participatory interest in a portfolio of a collective investment scheme, or a similar instrument;
any repurchase or resale agreement, forward purchase arrangement, forward sale arrangement, futures contract, option contract or swap contract;
(c) any other contractual right or obligation the value of which is determined directly or indirectly with reference to—
   (i) a debt security or equity;
   (ii) any commodity as quoted on an exchange; or
   (iii) a rate index or a specified index;
(d) any interest-bearing arrangement; and
(e) any financial arrangement based on or determined with reference to the time value of money or cash flow or the exchange or transfer of an asset

A “financial product” is not defined in the Act. According to the *Oxford Dictionaries*[^37] “financial” means –

“[r]elating to finance”; and

“product” means –

“[a] thing or person that is the result of an action or process”.

A financial product is therefore a result of an action or process which relates to finance. An example of this would be an income protection policy which is a product derived from an action or process which relates to finance.

The creation of any financial instrument or product is specifically excluded from the definition of “R&D” in section 11D(1).

### 3.8.7 The creation or enhancement of trademarks or goodwill

Any expenditure relating to trade marks, whether for the creation, development, protection, renewal or enforcement of a trademark is not deductible under section 11D.

### 3.8.8 Any expenditure associated with patents, trademarks, designs and copyright

The expenditure associated with the above is specifically excluded under section 11D but will be allowed as a deduction under section 11(gB) or (gC) if the requirements of those sections are met.

### PART B: DEDUCTION OF EXPENDITURE

#### 4. The law

**Section 11D(2)(a)**

Section 11D(2)(a) For the purposes of determining the taxable income of a taxpayer that is a company in respect of any year of assessment there shall be allowed as a deduction from the income of that taxpayer an amount equal to 150 per cent of so much of any expenditure actually incurred by that taxpayer directly and solely in respect of the carrying on of research and development in the Republic if—

(i) that expenditure is incurred in the production of income; and

(ii) that expenditure is incurred in the carrying on of any trade;

(iii) that research and development is approved in terms of subsection (9); and

(iv) that expenditure is incurred on or after the date of receipt of the application by the Department of Science and Technology for approval of that research and development in terms of subsection (9).

Regard must be had to the changes in the legislation and the effects of these changes for purposes of the deduction under section 11D.

**Pre- 1 January 2014**

Prior to 1 January 2014, a taxpayer would only have to obtain approval from the DST for the additional 50% deduction.

All applications received by the DST for period 1 October 2012 to 31 December 2013 will be adjudicated by only considering the additional 50% claimed under section 11D(2) and (3). Consideration will not be given to the 100% claimed under section 11D(2).

The determination on whether the expenditure qualifies for the 100% allowance under section 11D during this period is left to the discretion of the Commissioner.

**Post- 1 January 2014**

Section 11D was amended by the Taxation Laws Amendment Act\(^{38}\) to extend the Minister’s mandate to consider the entire claim for deduction of 150%. This dispensation is effective from 1 January 2014.

The rationale for this extension confirms the position that only activities that qualify as R&D under section 11D(1) should be eligible to claim a deduction under section 11D(2) and (4). Any other expenditure should be claimed under the general provisions contained in the Act.

**Example 10 – Expenditure not deductible under section 11D(2) or (4)**

_Facts:_

Company A submits an application under section 11D to develop a computer program by using off the shelf software to efficiently manage its payroll system. The computer software has not been developed by Company A but it will adapt the system to fit into its business operations in accordance with the user manuals and knowledge from the original developer. Company A employs IT specialists to undertake this task on its behalf.
Results:
The Committee has considered the application based on the requirements of section 11D and concludes that the application should not be recommended for the incentive since the adaptation of the software by a specialist skilled in the field of IT will not yield uncertain results, the activities undertaken are not technological or scientific, it merely resolves a technical problem and the adaptation of the software is not innovative in nature. Company A has not discharged the onus of proving to the Committee that the activities meet the requirements of section 11D(1). The Minister agrees with the recommendation and rejects the application under section 11D(1).

Effect of non-approval:
The taxpayer will not be able to claim any expenditure incurred in relation to its project under section 11D. Company A will still be able to claim a deduction for expenditure incurred limited to 100% under sections 11(a), 12C and 13 if it meets the requirements of those provisions.

Capital allowances were removed from section 11D and are catered for under the various allowance provisions such as sections 12C and 13. (See 5.) Similarly, financing, administration, compliance or similar costs are also excluded from section 11D(2). These costs can be claimed under the general provisions contained in the Act and the deductions will be limited to 100% of the expenditure actually incurred.

The expenditure incurred by an applicant on a prototype or pilot plant which is necessary for it to conduct its R&D activities and are created solely for purposes of the R&D will not be subject to the exclusion contained in section 11D(2) provided it is not developed for use in the production after the R&D is completed. In other words, it must form part of the R&D activities conducted by the applicant.

Expenditure will be limited to expenditure actually incurred on or after the receipt of the application by the DST.

The deduction of expenditure incurred for R&D is only available to companies. Individuals and trusts will not qualify for any deduction under section 11D(2).

4.1 Incurred by the taxpayer in the production of income

For R&D expenditure to be incurred in the production of income, it must have been outlaid for the purpose of earning “income” as defined in section 1(1) and must be closely connected to the income-earning operations. In the production of income means that it is not necessary that the income must be accrued to or received by the taxpayer during the year in which the expenditure has been incurred; the income may be earned in a future year. The result of the R&D activities might still be in a developmental phase or be completely unsuccessful, yet the expenditure will still qualify for the deductions, provided the taxpayer complies with the requirements of section 11D.

The requirement that a taxpayer use the product of the research in the production of income would apply, for example, to a company that conducts the R&D activities

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39 Port Elizabeth Electric Tramway Co Ltd v CIR 1936 CPD 241, 8 SATC 13; CIR v Genn & Co (Pty) Ltd 1955 (3) SA 293 (A), 20 SATC 113.
40 Sub-Nigel Ltd v CIR 1948 (4) SA 580 (A), 15 SATC 381.
itself with the intention of using the product of the research in its business. It would also apply to a company that pays another company a fee to conduct R&D activities on its behalf (that is, the company will use the product of the research in its business to produce income).

A taxpayer will be entitled to a deduction under section 11D(2) when the product of that taxpayer’s R&D activities is developed on behalf of someone else, provided the taxpayer derives income from its R&D activities (for example, in the form of a fee paid to the taxpayer by the person on whose behalf the R&D activities are being conducted).

For purposes of section 11D(2) a taxpayer that carries on research and development on behalf of another person and may determine or alter the methodology of the research, the activities undertaken by that taxpayer may qualify as R&D if it meets all the other requirements as contained in section 11D(1).41

4.2 Carrying on any trade

The definition of “trade” in section 1(1) is wide. The question whether the applicant conducts a trade is a factual question and a determination must be made by having regard to all the facts and circumstances. See paragraph 4 of Interpretation Note 33 (Issue 4) dated 22 July 2014 “Assessed Losses: Companies: The ‘Trade’ and ‘Income from Trade’ Requirements” for a discussion of this topic.

A taxpayer may begin a programme of scientific or technological R&D before trading commences. Such pre-trade expenditure would not qualify as a deduction under section 11D while trade is not underway.

Section 11A permits a deduction for R&D expenditure that would have qualified under section 11D had the expenditure been incurred after the taxpayer commenced carrying on a trade. The pre-trade R&D expenditure will be allowed as a deduction when the taxpayer commences to carry on any trade.42 However, under section 11A(2) the deduction is ring-fenced, that is, it is limited to the income less other allowable deductions from the particular trade. A taxpayer that abandons an R&D project before the commencement of trade will not be entitled to any deduction of the related R&D expenditure under section 11A. The latter provision requires that trade must commence before the qualifying pre-trade expenditure can be claimed as a deduction. However, once trade commences, the pre-trade R&D expenditure will qualify for the 150% deduction provided the requirements of section 11D(1) and (2) are respectively complied with.

4.3 Expenditure actually incurred by the taxpayer

The phrase “expenditure actually incurred by the taxpayer” is also used in other sections of the Act which have been considered by the courts. The general principle laid down by the courts is that expenditure is actually incurred not when it is paid (if paid in a subsequent year) but when the taxpayer incurs an unconditional legal liability.

In the field of R&D one company (A) will often commission another company (B) to conduct R&D on its (A’s) behalf. A will usually pay a fee to B, while B will incur the actual R&D expenditure. In these circumstances both companies will qualify for a

41 Section 11D(6).
42 Section 11A(1).
deduction under section 11D(2). A will qualify for a deduction on the fee it pays to B, and B will qualify for a deduction on the actual R&D expenditure it incurs. B should not be viewed as having recouped the expenditure merely because it undertakes R&D on behalf of A. The deduction granted to B will, however, be limited as the provisions of section 11D(5) and the general rule of recoupment will apply.

In the Republic

The word “Republic” is defined in section 1(1) and means the territory of the Republic of South Africa, including the territorial waters, the contiguous zone and the continental shelf referred to respectively in sections 4, 5 and 8 of the Maritime Zones Act 15 of 1994.

Activities that are conducted outside of the Republic, even if funded from within the Republic, are not eligible for the section 11D deductions.

Directly and solely for the purpose of

The activities eligible for a deduction must have been undertaken “directly and solely” for an R&D purpose. In the case of an entire project having an R&D purpose not all activities are undertaken directly and solely for the R&D purpose. Accordingly only activities relating directly to the listed statutory activities are eligible for a deduction, thereby eliminating general physical and administrative overheads.

For example, if an employee was not 100% of the time directly engaged in R&D activities in the year of assessment, the employee’s salary must be apportioned between R&D and non-R&D expenditure. For this reason, it is important that researchers’ timesheets, job cards, journals or diaries are kept. An apportionment of the expenses incurred may be necessary in order to ensure that only expenses directly related to the R&D activities undertaken qualify for a 150% deduction. The onus is on the taxpayer to prove that the expenditure is directly related to the R&D activities undertaken.

The words “directly and solely in respect of research and development” imply that any activity undertaken merely indirectly for an R&D purpose is not eligible for the deduction. To illustrate the point, the following extract from SIR v Consolidated Citrus Estates Ltd might be helpful:

“It would thus seem that ‘directly’ refers to and qualifies the act of incurring the expenditure. Obviously the expenditure must have been incurred by the taxpayer, ie he must have incurred the liability or made the payment. ‘Directly’ appears to have been deliberately added in order to serve some purpose that the legislature had in mind. That purpose, I think, was to postulate that the connection between the taxpayer’s incurring the expenditure and the object for which it was incurred [being one of those specified in paras (a) to (f) in the subsection] should be direct, i.e. straight, and close, not devious and remote (cf Concise Oxford English Dictionary sv ‘direct’). The reason was probably to stimulate the personal efforts of the individual exporter to develop an export market for his products; and therefore to ensure that for the expenditure to qualify for the additional and special allowance, it had to be incurred by the exporter himself and also had to be easily identifiable and thus readily provable to the Secretary’s satisfaction, as being clearly expenditure for one or other of the specified objects.”

43 Provisos to section 8(4)(a).
44 1976 (4) SA 500 (A), 38 SATC 126 at 148.
Example 11 – Apportionment of R&D expenditure between eligible and non-eligible elements

Facts:
During the 20x6 year of assessment Company A conducted 40 research projects of which 25 qualified as R&D for purposes of section 11D, while 15 did not. Company A employs –

- two full-time researchers;
- one clerk who is primarily responsible for administrative work but who also assists the researchers with their projects from time to time as and when needed; and
- one secretary exclusively responsible for administrative work.

Are the salaries of the personnel deductible under section 11D?

Result:
The salary (cost to company) of the full-time researchers will be deductible under section 11D only to the extent of their time spent on eligible research projects.

A portion of the salary of the clerk (cost to company) will be allowable under section 11D based on time spent in supporting the researchers directly with eligible research projects.

The salary of the secretary will not be allowable under section 11D as it is not incurred directly and solely for the purposes of R&D.

5. Exclusions

5.1 The law

Section 11D(2)(b)

(b) No deduction may be allowed under this subsection in respect of expenditure incurred in respect of—

(i) immovable property, machinery, plant, implements, utensils or articles excluding any prototype or pilot plant created solely for the purpose of the process of research and development and that prototype or pilot plant is not intended to be utilised or is not utilised for production purposes after that research and development is completed;

(ii) financing, administration, compliance and similar costs.

There are specific provisions in the Act which cater separately for expenditure relating to immovable property, machinery, plant, implements, utensils and articles as well as for financing, administration and compliance costs. These are discussed in detail below. Since 2014 section 11D no longer provides for an allowance on capital assets that are used for R&D activities. Taxpayers conducting R&D must seek an allowance on capital assets either under section 12C or 13. The allowance on the capital assets under those sections will be limited to 100%.
5.2 Capital allowances

An accelerated depreciation allowance on eligible assets are provided for under section 12C(1)(gA) and (h) on machinery and plant, and section 13(1)(b) or (d) on buildings respectively used for R&D activity.

A deduction will be allowed under section 12C(1)(gA) and (h) if the eligible assets are plant and machinery –

- owned by the taxpayer or acquired by that taxpayer as purchaser; and
- first brought into use by that taxpayer; or
- improved and used for purposes of R&D during the year of assessment.

A deduction will be allowed under section 13(1)(b) or (d) if the eligible assets are buildings erected or acquired by the taxpayer.

5.3 Meaning of “cost to the taxpayer” [sections 12C(2) and 13(1)]

The depreciable cost to the taxpayer of an eligible asset is determined under sections 12C(2) or 13(1) and is the lesser of –

- the actual cost to the taxpayer for the acquisition, installation and erection or improvement of the eligible asset; or
- the cost which a person would have incurred under a cash transaction concluded at arm’s length; or
- the cost of an asset that has been acquired to replace an asset which has been damaged or destroyed, less any amount which has been recovered or recouped on the damaged or destroyed asset and has been excluded from the taxpayer’s income under section 8(4)(e), whether in the current or any previous year of assessment.

In *Hicklin v SIR*45 Trollip JA said the following regarding the phrase “dealing at arm’s length”:

“For ‘dealing at arm’s length’ is a useful and often easily determinable premise from which to start the enquiry. It connotes that each party is independent of the other and, in so dealing, will strive to get the utmost possible advantage out of the transaction for himself. Indeed, in the Afrikaans text the corresponding phase is ‘die uiterste voorwaardes beding’.”

Finance charges incurred on the acquisition of eligible assets are deductible under –

- section 11A(1) for finance charges incurred during the period before an asset is brought into use; or
- section 24J(2) for finance charges incurred during the period after an asset is brought into use.

These charges are consequently not included in the cost of the assets. “Cost” means the cost price of the asset excluding finance charges.

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45 1980 (1) SA 481 (A), 41 SATC 179.
Example 12 – Cost price

Facts:
A researcher purchases a machine under an instalment credit agreement\(^\text{46}\) for R100,000, with a 10% deposit at 12% interest a year repayable over a 54-month period. The monthly instalments are R2,165.09.

What are the income tax consequences?

Result:
The cost price of the machine for purposes of a deduction under section 12C(1)(gA) is R100,000. The interest payments will be deductible under section 24J(2) over the period of the agreement.

Replacement of damaged or destroyed assets qualifying for rollover relief

Sections 12C(2) and 13(3) provides limited rollover relief for damaged or destroyed R&D depreciable eligible assets. For a detailed discussion on roll-over relief, see Chapter 13 of the Comprehensive Guide to Capital Gains Tax (Issue 5). If the eligible asset is acquired as a replacement of another asset which was damaged or destroyed, the cost for purposes of claiming the allowance under sections 12 and 13 must be reduced by any amount which was recovered or recouped for the damaged or destroyed asset that was excluded from the taxpayer’s taxable income under section 8(4)(e), whether in the current or a previous year of assessment.

5.4 Plant and machinery

The terms “plant” and “machinery” are not defined in the Act.

According to the Oxford Dictionaries,\(^\text{47}\) “plant” means –

“[a] place where an industrial or manufacturing process takes place” or “Machinery used in an industrial or manufacturing process”; and

“machinery” is the collective for machine which means –

“[a]n apparatus using mechanical power and having several parts, each with a definite function and together performing a particular task”.

Various court cases have dealt with the meaning of “plant” as contained in the Act.

In ITC 1234\(^\text{48}\) the Special Court dealt stated as follows:

“There is no definition of the word ‘plant’ in the Income Tax Act but the most generally invoked meaning is that given by Lindley LJ in Yarmouth v France (1887) 19 QB 647 at 658:

“but, in its ordinary sense, [plant] includes whatever apparatus is used by a businessman for carrying on his business – not his stock-in-trade which he buys or makes for sale; but all goods and chattels, fixed or movable, live or dead, which he keeps for permanent employment in his business’.”

\(^{46}\) Paragraph (a) of the definition of “instalment credit agreement” in section 1(1) of the Value-Added Tax Act, 1991.


\(^{48}\) (1975) 37 SATC 118 at 190 –191.
In *Blue Circle Cement Ltd v CIR*[^49] the court had to determine whether the railway line constituted plant for purposes of the Act. The purpose of the railway line was to provide a link between the appellant’s factory and the lime stone quarry and crushing plant. The question that the court had to deal with was whether the railway line fell within the definition of “plant” or “machinery”. The court relied on the dictum of Lindley LJ quoted by the Special Court in ITC 1234 as authority and applied the functional test to determine the meaning of the word “plant”. Corbett JA stated the following:

“The function performed by the railway line and the rolling stock used thereon in conveying the material is, in my opinion, part and parcel of the appellant’s industrial process and I can see no reason why the railway line should not be regarded as apparatus used in the carrying on the industrial process of manufacturing cement. The railway line, though needing periodic maintenance and repair, is durable and is intended to last the life of the limestone deposits at Springbokpan. In my opinion, it has all the characteristics of a plant.”

(Emphasis added)

Therefore any apparatus used in the process of manufacture or industrial process which is necessary for the function being performed by a taxpayer will be considered machinery for purposes of a capital allowance under section 12C.

*Plant and machinery owned by the taxpayer, or acquired by that taxpayer as purchaser*

The phrase “acquired by that taxpayer as purchaser” in section 12C(1)(gA) means acquired under an agreement contemplated in paragraph (a) of the definition of “instalment credit agreement” in section 1(1) of the Value-Added Tax Act, 1991. A lessee is accordingly not entitled to the deduction, but a co-owner may depreciate the plant and machinery proportionately to his or her share in the plant and machinery, provided all other requirements are met.

*Plant and machinery must be “first brought into use by that taxpayer”*

The phrase “brought into use for the first time” in section 12C(1)(gA) is the same phrase that was considered in ITC 1804[^50] in the context of section 12C(1)(b). The court distinguished the letting of an asset by a lessor from the use of the asset by the lessee. Boruchowitz J stated the following:^[51]

“The bringing into use of an asset is an act of a physical nature whereas letting or hiring is a jural or non-physical act. Only the user … can bring the machinery or plant into use for the first time for the purposes of its trade and this is a factual question.”

The plant and machinery must be first brought into use by the taxpayer for purposes of the R&D it undertakes. Any purpose other than R&D will not qualify for a depreciation allowance under section 12C(1)(gA).

New and unused plant and machinery acquired by the taxpayer and brought into use on or after 1 January 2012 for the purpose of R&D qualifies for a depreciation allowance –

- a deduction of 40% will be allowed on the cost to the taxpayer in the year that the asset is brought into use; and

[^49]: 1984 (2) SA 764 (AD); [1984] 2 All SA 188 (A).
[^50]: (2005) 68 SATC 105 (G).
[^51]: At 109.
• a deduction of 20% will be allowed in each of the three subsequent years of assessment that the asset is in use.

The above deduction also extends to any improvements effected to an eligible asset. Assets that do not meet the criteria for the allowance under section 12C may still qualify for an allowance under section 11(e).\textsuperscript{52}

\textit{Prior to first being brought into use by the taxpayer and not used by any person for any purpose}

Used plant and machinery cannot qualify for the depreciation allowance under section 12C.

\textbf{Example 13 – Second-hand machine}

\textit{Facts:}

An individual uses a machine in his business to conduct normal manufacturing. He started an R&D division and transferred the machine to that division.

Will the machine qualify for a depreciation allowance under section 12C(1)(gA)?

\textit{Result:}

The machine will not qualify for an allowance under section 12C(1)(gA) as it does not meet the requirements of section 12C(1)(gA) of being new or unused. The individual will have to seek an allowance under the provisions of section 11(e).

\section*{5.5 Buildings}

Section 13(1)(b) provides for an allowance on buildings\textsuperscript{53} used wholly or mainly for an R&D activity. The buildings could either be purchased or erected by the taxpayer for the said activity. The allowance also extends to the lessor of the building whose tenant or subtenant uses the building wholly or mainly for the purpose of R&D. Any improvement (other than repairs) effected to the building also qualifies for the allowance provided it is used either by the taxpayer or a lessee for an R&D activity.

The buildings must be erected or acquired by the taxpayer in order to qualify for the depreciation allowance under section 13C(1)(b), (d), (dA) or (e) respectively.

\textit{The building must be “wholly or mainly” used for an R&D purpose}

Section 13(1)(b), (d) and (dA) imposes a requirement that any building must be wholly or mainly used for an R&D activity. It follows that in order for the use to take place the building must be specifically equipped for that purpose. The question of whether a building is specifically equipped depends on the nature of the R&D and the facts and circumstances of the particular case. This requirement denies the depreciation allowance under section 13(1)(b), (d) or (dA) to a taxpayer that acquires a building for R&D purposes and then subsequently uses it for some other purpose.\textsuperscript{54}

\textsuperscript{52} See Interpretation Note 47 (Issue 3) dated 21 November 2012 “Wear-and-Tear or Depreciation Allowance” for more information about this allowance.


Example 14 – Building brought into use

Facts:
Company A erected a building in 2011. On completion it was occupied by senior management and fully used as the company’s operational headquarters for the next two years. Assume that during 2013 management relocated to another building and the research and technical division moved into it.

Can Company A depreciate the building under section 13?

Result:
The building can be depreciated under section 13 as it is wholly or mainly used for R&D purposes from the 2013 year of assessment.

In the year of assessment
The term “year of assessment” is defined in section 1(1) as –
“any year or other period in respect of which any tax or duty leviable under this Act is chargeable, and any reference in this Act to any year of assessment ending the last or the twenty-eighth or the twenty-ninth day of February shall, unless the context otherwise indicates, in the case of a company be construed as reference to any financial year of that company ending during the calendar year in question”.

Example 15 – Use of building

Facts:
A new building is acquired on 1 June 20x2 at a cost of R10 million. Determine the section 13(1)(dA) allowances for the three years of assessment ending 28 February 20x3, 20x4 and 20x5, assuming that 100% and 35% respectively of the building is used for an R&D activity.

Result:
A prerequisite to qualify for the allowance under section 13(1)(dA) is that the building must be used wholly or mainly for an R&D activity. In the situation where the building is used 100% for R&D the taxpayer will be entitled to the 5% annual allowance. The taxpayer will not be entitled to any portion of the allowance where the usage comprises only 35% of the total usage of the building.

<table>
<thead>
<tr>
<th>Allowances</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D building use</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>100%</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>35%</td>
<td>500 000</td>
<td>500 000</td>
<td>500 000</td>
</tr>
</tbody>
</table>

5.6 Administration, financing, compliance or similar expenditure

Section 11D(2) allows as a deduction R&D expenditure actually incurred directly and solely on R&D activities. Certain expenses while relating to the R&D project in general do not directly relate to the actual R&D. Costs related to the management
and support of the R&D project (administration costs) are specifically excluded as deductions under section 11D(2)(b).

Financing costs are also excluded from section 11D(2). Any expenditure incurred in the form of interest that relates to an interest-bearing arrangement will be subject to section 24J.

Any finance charges incurred will therefore not qualify for the 150% deduction as it is deductible under section 24J and not under section 11D. This limitation applies even if the interest is paid to an unconnected third party.

**Example 16 – Limitation on the deduction of interest [section 11D(2)(b)]**

**Facts:**
R&D Co. incurred the following expenditure in relation to its R&D activities:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rental – hire of laboratory from third party</td>
<td>50,000 R</td>
</tr>
<tr>
<td>Interest on bank loan used to finance purchase of R&amp;D equipment</td>
<td>150,000 R</td>
</tr>
<tr>
<td>Total rent and interest incurred</td>
<td>200,000 R</td>
</tr>
</tbody>
</table>

Calculate the amount which R&D Co. can claim as a deduction under section 11D.

**Result:**
The rental comprises payment for the right to use property which is used specifically for R&D purposes. R&D Co. will be entitled to the 150% deduction as provided for under section 11D(2). The deduction on the interest can only be claimed under section 24J and is limited to 100% of the cost incurred. R&D Co.’s deduction under section 11D(2) is therefore R75,000 of the rental expenditure. The interest will be limited to R150,000 and claimable under section 24J.

### 6. Funding for R&D

#### 6.1 The law

**Section 11D(4)**

(4) Where any amount of expenditure is incurred by a taxpayer to fund expenditure of another person carrying on research and development on behalf of that taxpayer, the taxpayer may deduct an amount contemplated in subsection (2)—

(a) if that research and development is approved by the Minister of Science and Technology in terms of subsection (9);

(b) if that expenditure is incurred in respect of research and development carried on by that taxpayer;

(c) to the extent that the other person carrying on the research and development is—

(i) (aa) an institution, board or body that is exempt from normal tax under section 10(1)(cA); or

(ii) (bb) the Council for Scientific and Industrial Research; or

(ii) a company forming part of the same group of companies, as defined in section 41, if the company that carries on the research and development does not claim a deduction under subsection (2); and
(d) if that expenditure is incurred on or after the date of receipt of the application by the Department of Science and Technology for approval of that research and development in terms of subsection (9).

Section 11D(5)

(5) Where a company funds expenditure incurred by another company as contemplated in subsection (4)(c)(ii), any deduction under that subsection by the company that funds the expenditure must be limited to an amount of 150 per cent of the actual expenditure incurred directly and solely in respect of that research and development carried on by the other company that is being funded.

Section 11D(7)

(7) Where any amount is received by or accrues to a taxpayer from—

(a) a department of the Government of the Republic in the national, provincial or local sphere;
(b) a public entity that is listed in Schedule 2 or 3 to the Public Finance Management Act; or
(c) a municipal entity as defined in section 1 of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000),

to fund expenditure in respect of any research and development, an amount equal to the amount that is funded must not be taken into account for purposes of the deduction under subsection (2) or (4).

6.2 Funding received by a company undertaking R&D activities

Subsection (4), (5) and (7) is aimed at addressing or overcoming difficulties associated with contract R&D and funding received for undertaking R&D activities.

An applicant that appoints another party to undertake the R&D on its behalf and incurs expenditure related directly to the services rendered by the other party in conducting such R&D will be regarded as having incurred expenditure that is directly related to the R&D activities undertaken by the contracted party if—

- the R&D is approved by the Minister under section 11D(9);
- the expenditure is incurred for R&D carried on by that taxpayer;
- that contracting party is—
  - an exempt institution, board or body under section 10(1)(cA);55
  - the CSIR; or
  - a company forming part of the same group of companies as the applicant and does not claim a deduction under section 11D(2); and
- the expenditure is incurred after the date that the application is received by DST for the approval under section 11D(9)

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55 For more information on the requirements for section 10(1)(cA) refer to the Tax Exemption Guide for Public Benefit Organisations in South Africa.
A company that provides funding to another company that forms part of the same group of companies\(^\text{56}\) as that company will only be allowed to deduct 150% of the expenditure actually incurred by such company which is directly and solely related to the R&D carried on by the other company to which it provides funding. The expenditure will only be allowed to be deducted provided the company undertaking the R&D activities has not claimed any deductions for that R&D activities. The funded company will only be able to claim expenditure for R&D to the extent that it was not funded by another company within the same group of companies.

A company that incurs expenditure for R&D activities undertaken by it but funded by a government department, public entity, or municipal entity will only be allowed to deduct 150% of expenditure incurred to the extent that such expenditure is not funded by one or more of the aforesaid entities, whether directly or indirectly.

**Example 17 – Indirect funding**

**Facts:**
Company A receives monies from University Z in order to conduct research in agriculture in order to determine whether it would be viable to develop a pesticide. University Z received funding for this specific initiative from the National Research Foundation (NRF) and uses these monies to fund the R&D of Company A.

**Result:**
Assuming that the project meets the requirements of section 11D(1) and Company A incurs the expenditure to conduct the research but the expenditure is funded by the University Z, the expenditure will not qualify for a deduction since the NRF is listed as a schedule 3 public entity under the Public Management Finance Act and there is no expenditure actually incurred by Company A for the research and development undertaken by it. The expenditure incurred that is not funded by NRF and is actually incurred by Company A, will however qualify for a deduction under section 11D(2).

7. **Deemed R&D activities**

7.1 **The law**

Section 11D(6)

(6) For the purposes of subsections (2) and (4)—

(a) a person carries on research and development if that person may determine or alter the methodology of the research;

(b) notwithstanding paragraph (a), certain categories of research and development designated by the Minister by notice in the *Gazette* are deemed to constitute the carrying on of research and development.

For purposes of determining whether a deduction under section 11D(2) or (4) should be granted, any person that may alter or determine a methodology of research that is conducted by another party would also qualify for a deduction under section 11D(2) or (4) to the extent that it incurs expenditure relating to that R&D.

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\(^{56}\) See definition of “group of companies” in section 1(1).
It often happens that a foreign entity enters into a contract with a taxpayer in South Africa to undertake all or part of the activities relating to R&D but the final product is owned by the off-shore entity due to the expertise or otherwise.

In this event, it is important to determine what activities will be conducted in the Republic and whether the taxpayer will be able to alter or determine methodologies associated with those activities. The approval will only be granted if the taxpayer can prove that it has the authority to alter the methodology of the research or determine a methodology for that research. This is a factual enquiry and the onus is on the taxpayer to prove that it is able to alter and control the methodologies of the R&D it undertakes on behalf of another person. To “determine” or “alter” implies more than just providing input into methodologies adopted.

Certain categories of R&D conducted in the Republic for R&D activities undertaken outside the Republic are not subject to the requirements above. Such taxpayers will be deemed to conduct R&D even if they do not have the authority to alter or determine methodologies associated with the R&D. An example of this is clinical trials conducted in the Republic which is specifically excluded from the requirement that the applicant must prove that it may alter or control the methodology of the R&D.

8. Disallowance of deductions

8.1 The law

Section 11D(10)

(10) If research and development is approved under subsection (9) and—

(a) any material fact changes which would have had the effect that approval under subsection (9) would not have been granted had that fact been known to the Minister of Science and Technology at the time of granting approval; or

(b) the taxpayer carrying on that research and development fails to submit a report to the committee as required by subsection (13),

(c) the taxpayer carrying on that research and development is guilty of fraud or misrepresentation or non-disclosure of material facts which would have had the effect that approval under subsection (9) would not have been granted,

the Minister of Science and Technology may, after taking into account the recommendations of the committee, withdraw the approval granted in respect of that research and development with effect from a date specified by that Minister.

Section 11D(19)

(19) The Commissioner may, notwithstanding the provisions of sections 99 and 100 of the Tax Administration Act raise an additional assessment for any year of assessment with respect to a deduction in respect of research and development which has been allowed, where approval has been withdrawn in terms of subsection (10).

The Minister may withdraw any approval granted under section 11D(9) –

- if the prior approval is based on a change of a material fact which would have resulted in the approval not being granted in the first place;

- if the taxpayer fails to submit a report on the progress of that R&D project within 12 months after the close of each year of assessment; or
• it is found that the person conducting R&D is guilty of fraud, misrepresentation or non-disclosure of material facts which would have had the effect that approval under subsection (9) would not have been granted

If there is a change in a material\(^{57}\) fact, the Minister will, after consultation with the Committee, evaluate the need to reverse a prior approval. The Minister will also determine the date from which the withdrawal of the prior approval will take effect.

In *Rex v Milne and Erleigh*,\(^\text{58}\) Lucas AJ, referred to English case law and authority to give effect to the meaning of what is meant by material. The court referred to the English authority, *Halsbury*, which described material as –

“[a] representation is material when its tendency or its natural and probable result is to induce the representee to act on the faith of it in the kind of way in which he is proved to have in fact acted”.

The Commissioner may raise an additional assessment under the TA Act in respect of any year of assessment in which a deduction was allowed under section 11D(2) and subsequently withdrawn by the Minister under section 11D(19).

The effect of the withdrawal will result in a disallowance of expenditure that has previously been allowed under section 11D(2). The Commissioner may also raise an additional assessment together with penalties and interest to give effect to the decision of the Minister to withdraw its approval under section 11D(1). The provisions of sections 99 and 100 of the TA Act that relate to the prescription of an assessment will not preclude the Commissioner from raising an additional assessment based on the application of section 11D(10) and (19).

Deductions claimed under sections 12C and 13 will only be affected to the extent that it no longer meets the requirements of the section in the event that the Minister withdraws the approval under section 11D(10). A withdrawal by the Minister may result in a recoupment of accelerated allowances previously claimed and allowed under section 12C and 13 to the extent that the taxpayer cannot prove that the said sections apply.

**Example 18 – Disallowance and recoupment of expenditure and allowances previously claimed under section 11D(3) or (4) and section 12C**

**Facts:**

Company A applied and received approval for its R&D project as an invention for the development of an updated computer processor. Company A was entitled to and claimed the 150% deduction under section 11D(2). Company A claims the deduction for the 2013 and 2014 years of assessment. However, during the 2015 year of assessment Company A is sued for infringement as it had merely copied the invention of a university student that was entered in at a technology expo. The Minister, after consultation with the Committee and on consideration of all the facts, concluded that the R&D did not meet the requirement of being innovative. The Minister resolved that the R&D project would not have qualified for the 150% deduction had this fact been known at the time that the Committee made the recommendation to the Minister to approve the project under section 11D(1).

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\(^{57}\) See *Parsons v Viscount Gage* 1973\(^\text{3}\) All ER 23, where Lord Denning MR stated that “... a “material” part means an important part.”

\(^{58}\) 1950 (4) SA 596 (W).
Company A’s deduction for the 2013 and 2014 years of assessment were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Section 11D(2) allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>150 000</td>
</tr>
<tr>
<td>2014</td>
<td>200 000</td>
</tr>
</tbody>
</table>

In addition to the expenditure under section 11D(2), Company A also claimed an allowance for acquisition of assets at a cost of R400 000 under section 12C(gA) at an accelerated rate of 50:30:20:

<table>
<thead>
<tr>
<th>Year</th>
<th>Section 12C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>200 000</td>
</tr>
<tr>
<td>2014</td>
<td>120 000</td>
</tr>
</tbody>
</table>

Determine the deductions to be disallowed due to the withdrawal of the prior approval of the R&D project.

**Results:**

**Section 11D(2)**

The Commissioner will raise additional assessments for the 2013 and 2014 years of assessment by disallowing the deductions claimed under section 11D(2), that is the R150 000 and R200 000, respectively.

**Section 12C(gA)**

The withdrawal of the approval will result in a recoupment of R80 000 under section 8(4)(a) in the 2015 year of assessment for the section 12C allowance previously granted at an accelerated rate of 50:30:20 to bring it in line with the rate that would have been allowed in the absence of section 11D at a rate of 40:20:20:20 calculated as –

- R40 000 for the 2013 year of assessment; and
- R40 000 for the 2014 year of assessment

**PART C: R&D ADJUDICATION COMMITTEE**

9. **Appointment of the Committee**

9.1 **The law**

**Section 11D(11)**

(a) A committee must be appointed for the purposes of approving research and development under subsection (9) consisting of –

(i) three persons employed by the Department of Science and Technology, appointed by the Minister of Science and Technology;

(ii) one person employed by the National Treasury, appointed by the Minister of Finance; and

(iii) three persons from the South African Revenue Service, appointed by the Minister of Finance.
(b) The Minister of Science and Technology or the Minister of Finance may appoint alternative persons to the committee if a person appointed in terms of paragraph (a) is not available to perform any function as a member of the committee.

(c) If any person is appointed as an alternative in terms of paragraph (a), that person may perform the function of any other person from the Department of Science and Technology, or the South African Revenue Service in respect of which institution that person is appointed as alternative.

The Committee consists of seven members: three persons from DST appointed by the Minister, and one person from National Treasury and three persons from SARS appointed by the Minister of Finance.

Alternate persons may be appointed by the Ministers of Trade and Industry and Finance in order to ensure that the required number of members from the respective state entities is represented in the Committee.

In addition, any person appointed as alternate member may perform the function of either an alternate or main member of the respective department to serve on the Committee as required.

10 Functions of the Committee

10.1 The law

Section 11D(12)

(12) (a) The committee appointed in terms of subsection (11) must perform its functions impartially and without fear, favour or prejudice.

(b) The committee may—

(i) appoint its own chairperson and determine the procedures for its meetings;

(ii) evaluate any application and make recommendations to the Minister of Science and Technology for purposes of the approval of research and development in terms of subsection (9);

(ii) investigate or cause to be investigated research and development approved under subsection (9);

(iv) monitor all research and development approved under subsection (9)—

(aa) to determine whether the objectives of this section are being achieved; and

(bb) to advise the Minister of Finance and the Minister of Science and Technology on any future proposed amendment or adjustment of this section;

(v) for a specific purpose and on the conditions and for the period as it may determine, obtain the assistance of any person to advise the committee relating to any function assigned to that committee in terms of this section; and

(vi) require any taxpayer applying for approval of research and development in terms of subsection (9), to furnish any information or documents necessary for the Minister of Science and Technology and the committee to perform their functions in terms of this section.
The Committee performs the following functions:

- Appoints its own chairperson and determines the procedures for its meetings.
- Evaluates R&D applications received for the purpose of determining whether the project for which the approval is sought complies with criteria contemplated in the definition of “R&D” in section 11D(1).
- Make the necessary recommendations to the Minister for approval under section 11D(9).
- Investigates or appoints persons to investigate applications that have been approved as R&D.
- Monitors all applications approved for the purpose of determining if the objectives of the incentive are being achieved and advises the respective Ministers on any future proposed amendment or adjustment of this section.
- Obtains assistance from persons with appropriate experience and expertise to advise the Committee on a specific matters when required.
- Requests any additional information or documents from an applicant in support of the application submitted.

In addition to the aforementioned functions, the Committee may also make recommendations to the Minister to withdraw approvals under the circumstances as listed in section 11D(10).59

The onus is on the taxpayer to submit an application form that will enable the Committee to properly adjudicate its application. Section 11D(9)(a) requires the applicant to prove that its activities meet the definition of “R&D”. This means that the taxpayer must submit all documents necessary to satisfy the Committee that the application and the R&D to be undertaken meets the requirements under section 11D(1). The application form must be submitted together with all necessary supporting documentation. The onus is not on the Minister to disprove any application submitted by providing evidence in support of his or her reasons for not approving any application.60

It is accepted that when a taxpayer submits an application for approval under section 11D that it understands the requirements of the aforesaid section and will submit all documentation necessary to enable the Committee to make appropriate recommendations to the Minister and for the Minister to take the appropriate decisions regarding such applications.

Applications for approval of R&D activities must be submitted on a project-by-project basis rather than on a departmental basis. An application submitted on a departmental basis (unless it specifies the actual projects being applied for under each department) will not be considered by the Committee. This will not preclude any person from re-applying for the section 11D incentive but it will influence the date from which the R&D application is approved or rejected by the Minister.

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59 See 8.1.
60 Minister of Environmental Affairs & Tourism v Phambili Fisheries & Another 2003 (6) SA 407 (SCA).
Example 19 – Application on departmental basis

Facts:
Company A is well known for its innovative ideas and is the market leader in the technological space. Company A decides to establish a separate division to focus on R&D in order to ensure that it retains and increases market share by always being innovative. The division has also been established to test new methods of applying existing technology to increase internal efficiencies. Company A submits an application to the DST for approval of the division itself in order to ensure that it always receives the 150% deduction for work undertaken in this division.

Result:
The application for R&D under section 11D(1) will not be considered for the entire division. Company A will be required to specify each individual project and provide adequate information about each project to be undertaken within the division. The projects themselves will be assessed to determine whether it meets the requirements of section 11D(1) and will be adjudicated individually. Company A will be required to submit a new application for every new project undertaken in that division should it wish to make use of the incentive under section 11D.

The Committee’s mandate is limited to the approval process. It remains the responsibility of the Commissioner to determine the extent to which the expenditure claimed is actually incurred by the taxpayer and whether that expenditure is directly linked to the R&D activities undertaken.

11 Conduct of the Committee members

11.1 The law

Section 11D(15)

(15) The members of the committee appointed in terms of subsection (11) and any person whose assistance has been obtained by that committee may not—

(a) act in any way that is inconsistent with the provisions of subsection (12)(a) or expose themselves to any situation involving the risk of a conflict between their responsibilities and private interests; or

(b) use their position or any information entrusted to them to enrich themselves or improperly benefit any other person.

The integrity of the Committee must be preserved by its members by ensuring that the confidentiality of all applications is maintained.

No member of the Committee may use any confidential information contained in the application for self-enrichment or for the benefit of any other person.

Committee members must avoid situations that may result in any potential conflict of interest. Conflict of interest usually arises when the information obtained in the Committee is used to obtain own personal benefit by the member. No conflict exists where the member of the Committee acts in a different capacity on the same information provided by the applicant for purposes of approval by the Minister and to claim the expenditure under section 11D(2).
See 13.3 for the Committee members’ responsibility regarding confidentiality.

12 Decision of the Minister

12.1 The law

Section 11D(16)

(16) The Minister of Science and Technology or the person appointed by the Minister of Science and Technology contemplated in subsection (9) must—

(a) provide written reasons for any decision to grant or deny any application for approval of any research and development under subsection (9), or for any withdrawal of approval contemplated in subsection (10);

(b) inform the Commissioner of the approval of any research and development under subsection (9), setting out such particulars as are required by the Commissioner to determine the amount of the deduction in terms of subsection (2) or (4); and

(c) inform the Commissioner of any withdrawal of approval in terms of subsection (10) and of the date on which that withdrawal takes effect.

The decision of the Minister with regard to any application received must be communicated to the taxpayer. Written reasons must be provided if an application is approved, declined or an approval is withdrawn.

Section 5 of the Promotion of Administrative Justice Act 3 of 2000 (PAJA) requires an administrator to provide adequate reasons when taking an administrative action against any person whose rights have been materially and adversely affected by such action. The Supreme Court of Appeal in Minister of Environmental Affairs & Tourism v Phambili Fisheries & Another considered what constitutes adequate reasons. The court relied on an Australian judgment wherein the following remarks were stated:

“Even though I may not agree with it, I now understand why the decision went against me. I am now in a position to decide whether that decision has involved an unwarranted finding of fact, or an error of law, which is worth challenging.”

The onus was on the applicant to submit all the required supporting documentation in order to qualify for a fishing quota. An advisory committee had been established to consider all applications and the decisions of the Minister was based on the presentations made to him by the advisory committee (similar to the current position under the R&D incentive).

The court stated that –

“[T]he respondents’ approach is so unreasonable that it leads to a person embracing it to be forced to seek an explanation for that which needs no explanation….It should be added that what reasons are to be given for is the decision of the decision maker. The decision in this case is the allotment of certain tonnages to particular applicants. The reasons for that decision in my opinion are set out and are chiefly that there will be no new entrants, that 51 of the existing holders are to be allocated quotas, that the allocations for the previous year will be used as a starting point, save that five percent will be deducted for redistribution to further transformation. Further it is made plain that the need to achieve stability has been taken into account. These reasons are enough for dissatisfied applicants.”

61 2003 (6) SA 407 (SCA); [2003] 2 All SA 616 (SCA)
to attack the decision should they so choose. My conclusion is that the reasons were given, that they were reasonably clear and adequate.”

(Emphasis added)

In Rean International Supply Co. (Pty) Ltd v Mpumalanga Gaming Board\(^{62}\) the court held that it is not necessary for an administrative body to spoon-feed an aggrieved party seeking reasons.

This view is supported by the Maimela judgment\(^{63}\) wherein it was held that the court could only prescribe to an administrative decision maker that he had not provided reasons or that the reasons provided were not adequate. It cannot prescribe what the reasons for its decisions should be. The court stated the following:

“The adequacy of reasons will depend on a variety of factors such as the factual context of the administrative action, the nature and complexity of the action, the nature of the proceedings leading up to the action and the nature of the functionary taking the action. Depending on the circumstances, the reasons need not always be “full written reasons”; the “briefest pro forma reasons may suffice” (See Hoexter op cit at 246; Rean International Supply Company (Pty) Ltd and Others v Mpumalanga Gambling Board 1999 (8) BCLR 918 (T) at 927A–B.) Whether brief or lengthy, reasons must, if they are read in their factual context, be intelligible and informative. They must be informative in the sense that they convey why the decision maker thinks (or collectively think) that the administrative action is justified.”

(Emphasis added)

There is no requirement under PAJA that compels the Minister to provide evidence in support of the reasons for the decision taken.

The Minister is required to provide written reasons for the decision to grant, deny or withdraw an application. This principle was also reinforced by the court in the Phambili Fisheries judgment\(^{64}\) wherein the respondents questioned the decision of the Chief Director on the basis that there was no direct evidence not to admit any new applicants and granted rights to 51 of the 54 existing rights holders. The court held that the respondent did not require more than that which was given to it for it to understand the decision and to assess whether to challenge the decision.

It is important not to conflate the difference between reasons for a decision and evidence in support of that decision. The table below attempts to illustrate the difference between reasons for a decision and providing evidence in support of decision:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>The project is not innovative because it is not new to market.</td>
<td>The project is not innovative because the following sources indicate that a similar product or process exists in South America.</td>
</tr>
</tbody>
</table>

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\(^{62}\) 1998 (8) BCLR 918  
\(^{63}\) Commissioner of the South African Police Services and Others v Maimela and Another 2004 (1) BCLR 47 (T)  
\(^{64}\) 2003 (6) SA 407 (SCA)
Reason Evidence
It is does not meet the requirements of a functional design because it is aesthetic in nature. It is not a functional design because it is common place, it has already been developed by XYZ in 2010.
The activities do not resolve a technological uncertainty but a technical problem. The activities do not resolve a technological uncertainty because it only requires adaptation of existing software to be used in the Company’s internal management of business. According to professor Z’s research paper, the software to be used has already been developed in 2006.

The Minister must also inform the Commissioner of any approval or withdrawal of any prior approvals.

The information provided to the Commissioner for any approval must set out all details as required by the Commissioner to determine the amount of the deduction to be granted under section 11D(2).

The effective date of the withdrawal must also be communicated to the Commissioner in order to determine the date from which it should raise an additional assessment under the TA Act.

Any decision taken by the Minister under section 11D is not subject to objection and appeal procedures under the Act. An applicant that is not satisfied with the decision of the Minister under section 11D(1) must therefore apply to the High Court to take the matter on review in accordance with the provisions in PAJA.

PART D: OTHER PROVISIONS

13. Reporting requirements

13.1 Reporting by the taxpayer to the Minister

13.1.1 The law

Section 11D(13)

(13) A taxpayer carrying on research and development approved under subsection (9) must report to the committee annually with respect to—
(a) the progress of that research and development; and
(b) the extent to which that research and development requires specialised skills,
within 12 months after the close of each year of assessment, starting with the year following the year in which approval is granted under subsection (9) in the form and in the manner that the Minister of Science and Technology may prescribe.

A taxpayer is required to annually submit a progress report on the R&D conducted and the extent to which such R&D requires specialised skills to the Committee. The required information must be submitted in the form and manner (including electronically) and at the place as the Minister may from time to time prescribe.
The first submission is due within 12 months after the close of each year of assessment in which approval was granted and every year thereafter in which the deduction is claimable.

Reporting on an annual basis enables the DST to, amongst others –

- measure the success of the incentive;
- monitor progress of the activities and the expenditure actually incurred in conducting the R&D activity; and
- ensure that R&D activities are being conducted by the applicant.

Further information about the reporting requirements can be obtained directly from the DST’s website www.dst.gov.za.

13.2 Reporting by the Minister to Parliament

13.2.1 The law

Section 11D(14)

(14) Notwithstanding Chapter 6 of the Tax Administration Act, the Commissioner may disclose to the Minister of Science and Technology information in relation to research and development—

(a) as may be required by that Minister for the purposes of submitting a report to Parliament in terms of subsection (17); and

(b) if that information is material in respect of the granting of approval under subsection (9) or a withdrawal of that approval in terms of subsection (10).

Section 11D(17)

(17) The Minister of Science and Technology must annually submit a report to Parliament advising Parliament of the direct benefits of the research and development in terms of economic growth, employment and other broader government objectives and the aggregate expenditure in respect of such activities without disclosing the identity of any person.

The Minister is required to report annually to Parliament about the direct benefits arising from the activities in section 11D(1) in respect of –

- economic growth;
- employment;
- other broader government objectives; and
- the aggregate expenditure for such activities.

The Commissioner may be required to provide information necessary to enable the Minister to comply with its reporting requirements under section 11D(17). The Commissioner will not be subject to the secrecy provisions insofar as it provides the Minister with information necessary to meet the aforesaid reporting requirements or information to enable the Minister to approve an application under section 11D(9) or withdraw an approval under section 11D(10).
13.3 Preservation of secrecy

13.3.1 The law

**Section 11D(18)**

(18) Every employee of the Department of Science and Technology, every member of the committee appointed in terms of subsection (11) and any person whose assistance has been obtained by that committee—

(a) must preserve and aid in preserving secrecy with regard to all matters that may come to their knowledge in the performance of their functions in terms of this section; and

(b) may not communicate any such matter to any person whatsoever other than to the taxpayer concerned or its legal representative, nor allow any such person to have access to any records in the possession or custody of the Department of Science and Technology or committee, except in terms of the law or an order of court.

R&D activities and the results may be secret and confidential and the taxpayer relies on such confidentiality to protect its commercial interests. It is therefore necessary that the Minister and every Committee member appointed under section 11D(11) or any person employed or engaged by the Minister to carry out the provisions of section 11D preserve secrecy with regard to all matters that may come to his or her knowledge in the performance of his or her duties under section 11D.

The Committee member is bound by confidentiality to preserve secrecy of the information presented at the Committee and may not disclose this information to any other party except in the performance of his or her duties as a Committee member.

The preservation of secrecy for purposes of section 11D also extends to any person assisting the Committee (whether in an administrative capacity or otherwise), it is not limited to only the members of the Committee.

14. Record-keeping

Under section 29 of the TA Act a taxpayer must retain all records relevant to a tax return for a period of five years from the date on which that return was submitted to SARS. Taxpayers claiming expenditure under section 11D will need to keep amongst other things –

- records of R&D expenditure claimed under section 11D(2) or (4), including but not limited to timesheets and apportionment calculations to determine expenditure claimable;
- details of assets (such as dates of acquisition and disposal, description, cost and deductions claimed) for which –
  - a section 12C(1)(gA); 11(e) or 13(1)(b), (d) or (dA) deduction has been claimed; or
  - a deduction under the prior section 11D(1) has been claimed,
- details of grants (including government grants) received or accrued to fund R&D expenditure;
- details of related recoupments;
- records which monitor the technical progress of the R&D activities; and
15. Conclusion

The information contained in this Note provides broad principles in interpreting the legislation pertaining to the deduction for scientific or technological R&D. As the facts and circumstances pertaining to specific R&D activities or projects differ, each case must be considered on its own merits.

The deduction of the 150% deduction is subject to the requirements of section 11D(1). The onus is on the applicant to prove to the Minister that it complies with the requirements of section 11D.

The R&D tax incentive is a privilege granted to taxpayers undertaking R&D and the legislation regulating this incentive will be applied strictly and narrowly in order to ensure effective administration of the incentive.

The approval of any R&D application is the responsibility of the Minister. It remains the responsibility of the Commissioner to verify whether the deductions incurred are directly and solely for purposes of the approved R&D.

A withdrawal of an approval by the Minister will result in a recoupment of expenditure already claimed and allowed under section 11D(2) irrespective of the prescription periods under the TA Act.

Legal Counsel
SOUTH AFRICAN REVENUE SERVICE
Date of 1st issue : 28 August 2009
Annexure
Section 12C

12C. Deduction in respect of assets used by manufacturers or hotelkeepers and in respect of aircraft and ships, and in respect of assets used for storage and packing of agricultural products.—(1) In respect of any—

(gA) new or unused machinery or plant, which is owned by a taxpayer, or acquired by a taxpayer as purchaser in terms of an agreement contemplated in paragraph (a) of the definition of “installment credit agreement” in section 1(1) of the Value-Added Tax Act, 1991 (Act No. 89 of 1991), and is first brought into use by that taxpayer for purposes of research and development as defined in section 11D;

(h) improvement (other than repairs) to any machinery, plant, implement, utensil or article referred to in paragraph (a), (b), (c), (d), (e) or (gA), which is during the year of assessment used as contemplated in that paragraph,

a deduction equal to 20 per cent of the cost to that taxpayer to acquire that machinery, plant, implement, utensil, article, ship, aircraft or improvement (hereinafter referred to as the asset) shall, subject to the provisions of subsection (4), be allowed in the year of assessment during which the asset is so brought into use and in each of the four succeeding years of assessment: Provided that where—

(a) such asset is a ship or aircraft, the deduction shall be calculated on the adjustable cost as determined in terms of section 14 or 14bis, as the case may be; and

(b) . . . . .

(c) any new or unused machinery or plant referred to in paragraph (a) of this subsection or improvement referred to in paragraph (h) of this subsection, is or was—

(i) acquired by the taxpayer under an agreement formally and finally signed by every party to the agreement on or after 1 March 2002; and

(ii) brought into use by the taxpayer on or after that date in a process of manufacture or process which in the opinion of the Commissioner is of a similar nature, carried on by that taxpayer in the course of its business (other than banking, financial services, insurance or rental business),

the deduction under this subsection shall be increased to 40 per cent of the cost to that taxpayer of that machinery, plant or improvement in respect of the year of assessment during which the plant, machinery or improvement was or is so brought into use for the first time and shall be 20 per cent in each of the three subsequent years of assessment;

(d) any new or unused machinery or plant referred to in paragraph (gA) of this subsection or improvement referred to in paragraph (h) of this subsection, is or was—

(i) acquired by the taxpayer under an agreement formally and finally signed by every party to the agreement on or after 1 January 2012; and

(ii) brought into use by the taxpayer on or after that date for the purpose of research and development as defined in section 11D:

Provided further that where any machinery, plant, implement, utensil, article or improvement qualifying for an allowance under this section is mounted on or affixed to any concrete or other foundation or supporting structure and the Commissioner is satisfied that—

(a) the foundation or supporting structure is designed for such machinery, plant, implement, utensil, article or improvement and constructed in such manner that it is or should be regarded as being integrated with the machinery, plant, implement, utensil, article or improvement; and
the useful life of the foundation or supporting structure is or will be limited to the useful life of the machinery, plant, implement, utensil, article or improvement mounted thereon or affixed thereto,

the foundation or supporting structure shall be deemed to be a part of the machinery, implement, utensil, article or improvement mounted thereon or affixed thereto.

Section 13

13. Deductions in respect of buildings used in a process of manufacture.—
(1) Notwithstanding anything to the contrary contained in paragraph (ii) of the proviso to section 11 (e), there shall be allowed to be deducted from the income of the taxpayer an allowance equal to two per cent of the cost (after the deduction of any amount referred to in subsection (3) or (7) or the corresponding provisions of any previous Income Tax Act) to the taxpayer of—

(a) . . . . .

(b) any building the erection of which was commenced by the taxpayer on or after the fifteenth day of March, 1961, if such building was wholly or mainly used by the taxpayer during the year of assessment for the purpose of carrying on therein in the course of his trade (other than mining or farming) any process of manufacture, research and development or any other process which is of a similar nature, or such building was let by the taxpayer and was wholly or mainly used by a tenant or subtenant for the purpose of carrying on therein any process as aforesaid in the course of any trade (other than mining or farming); or

(c) . . . . .

(d) any building the erection of which was commenced on or after the fifteenth day of March, 1961, if such building has been acquired by the taxpayer by purchase from any other person who was entitled to an allowance in respect thereof under paragraph (b) or this paragraph or the corresponding provisions of any previous Income Tax Act, and such building was wholly or mainly used during the year of assessment by the taxpayer for the purpose of carrying on therein in the course of his trade (other than mining or farming) a process of manufacture, research and development or any other process which is of a similar nature, or such building was let by the taxpayer and was wholly or mainly used by a tenant or subtenant for the purpose of carrying on therein in the course of any trade (other than mining or farming) any process as aforesaid; or

(dA) any building that has never been used, if such building has been acquired by the taxpayer by purchase from any other person and such building was wholly or mainly used during the year of assessment by the taxpayer for the purpose of carrying on therein in the course of his trade (other than mining or farming) any process of manufacture, research and development or any other process which is of a similar nature, or such building was let by the taxpayer and was wholly or mainly used by a tenant or subtenant for the purpose of carrying on therein in the course of any trade (other than mining or farming) any process as aforesaid; or

(e) any improvements (other than repairs) to any building referred to in paragraph (a), (b), (c) or (d) which is during the year of assessment used as contemplated in that paragraph, if such improvements were commenced not later than the thirty-first day of March, 1971;

Provided that—

(a) no allowance shall be made under this subsection in respect of such portion of the cost of any building the erection of which was commenced on or after 1 July 1961, or any improvements effected thereto as has been taken into account in the calculation of any allowance to the taxpayer under section 11(g) whether in the current or any previous year of assessment;
(b) in the case of any such building the erection of which has or is commenced on or after 1 January 1989 and any such improvements which have or are commenced on or after that date, other than any building or improvements in respect of which the increased allowance contemplated in paragraph (c) of this proviso applies, the allowance under this subsection shall be increased to 5 per cent of the cost (after the deduction of any amount as provided in subsection (3)) to the taxpayer of such building or improvements; and

(c) . . . . . .

(d) in the case of an improvement completed by a taxpayer as contemplated in section 12N, the expenditure incurred by the taxpayer to complete the improvement shall for the purposes of this section be deemed to be the cost to the taxpayer of any building or improvement contemplated in this subsection.

Section 25 of the Patents Act:

Patentable inventions.—(1) A patent may, subject to the provisions of this section, be granted for any new invention which involves an inventive step and which is capable of being used or applied in trade or industry or agriculture.

(2) Anything which consists of—

(a) a discovery;
(b) a scientific theory;
(c) a mathematical method;
(d) a literary, dramatic, musical or artistic work or any other aesthetic creation;
(e) a scheme, rule or method for performing a mental act, playing a game or doing business;
(f) a program for a computer; or
(g) the presentation of information,
shall not be an invention for the purposes of this Act.

(3) The provisions of subsection (2) shall prevent, only to the extent to which a patent or an application for a patent relates to that thing as such, anything from being treated as an invention for the purposes of this Act.

(4) A patent shall not be granted—

(a) for an invention the publication or exploitation of which would be generally expected to encourage offensive or immoral behaviour; or
(b) for any variety of animal or plant or any essentially biological process for the production of animals or plants, not being a micro-biological process or the product of such a process.

(5) An invention shall be deemed to be new if it does not form part of the state of the art immediately before the priority date of that invention.

(6) The state of the art shall comprise all matter (whether a product, a process, information about either, or anything else) which has been made available to the public (whether in the Republic or elsewhere) by written or oral description, by use or in any other way.

(7) The state of the art shall also comprise matter contained in an application, open to public inspection, for a patent, notwithstanding that that application was lodged at the patent office and became open to public inspection on or after the priority date of the relevant invention, if—

(a) that matter was contained in that application both as lodged and as open to public inspection; and
(b) the priority date of that matter is earlier than that of the invention.

(8) An invention used secretly and on a commercial scale within the Republic shall also be deemed to form part of the state of the art for the purposes of subsection (5).

(9) In the case of an invention consisting of a substance or composition for use in a method of treatment of the human or animal body by surgery or therapy or of diagnosis practised on the human or animal body, the fact that the substance or composition forms part of the state of the art immediately before the priority date of the invention shall not prevent a patent being granted for the invention if the use of the substance or composition in any such method does not form part of the state of the art at that date.

(10) Subject to the provisions of section 39(6), an invention shall be deemed to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms, immediately before the priority date of the invention, part of the state of the art by virtue only of subsection (6) (and disregarding subsections (7) and (8)).

(11) An invention of a method of treatment of the human or animal body by surgery or therapy or of diagnosis practised on the human or animal body shall be deemed not to be capable of being used or applied in trade or industry or agriculture.

(12) Subsection (11) shall not prevent a product consisting of a substance or composition being deemed to be capable of being used or applied in trade or industry or agriculture merely because it is invented for use in any such method.