Docket: 2016-5458(IT)G

BETWEEN:

INDUSOL INDUSTRIAL CONTROL LTD.,

Appellant,

and

HER MAJESTY THE QUEEN,

Respondent.

---

Appeal heard on February 10, 11 and 12, 2020 at Trois-Rivières, Quebec

Before: The Honourable Justice Dominique Lafleur

Appearances:

| | |
|---|---|
| Agent for the Appellant: | Robbert Jan van Eijle |
| Counsel for the Respondent: | Christina Ham |

---

**JUDGMENT**

In accordance with the attached Reasons for Judgment, the appeal from the reassessment, the notice of which is dated July 21, 2014, made under the *Income Tax Act* for the Appellant's 2012 taxation year (being the period from April 1, 2011 to March 31, 2012) is dismissed with costs to the Respondent.

Signed at Montreal, Quebec, this 14th day of September 2020.

"Dominique Lafleur"

Lafleur J.

Citation: 2020 TCC 103
Date: 20200914
Docket: 2016-5458(IT)G

BETWEEN:

INDUSOL INDUSTRIAL CONTROL LTD.,

Appellant,

and

HER MAJESTY THE QUEEN,

Respondent.

**REASONS FOR JUDGMENT**

Lafleur J.

I- INTRODUCTION

[1] Indusol Industrial Control Ltd. ("Indusol" or the "Appellant") filed an appeal with this Court in respect of a reassessment, the notice of which is dated July 21, 2014, made under the *Income Tax Act* (R.S.C. 1985, c. 1 (5th Supp.)) (the "Act") for its 2012 taxation year, being the period from April 1, 2011 to March 31, 2012 (the "2012 taxation year").

[2] In so reassessing, the Minister of National Revenue (the "Minister") was of the view that the activities undertaken by Indusol with respect to a project called the "Draught [Draft] Information System" (the "DIS" or the "DIS Project") during the 2012 taxation year did not meet the criteria of the definition of scientific research and experimental development ("SR&ED") in subsection 248(1) of the Act. Consequently, the Minister rejected Indusol's claim that expenses totalling $111,883 were SR&ED expenditures under the Act. The Minister denied the deduction of the said expenses as well as the investment tax credit ("ITC") of $49,224 claimed in connection with those expenses.

[3] At the hearing, Mr. Robbert Jan van Eijle, the president of Indusol, as well as its sole shareholder and director, represented Indusol and testified on its behalf. Ms. Sandrine Nothomb, a Canada Revenue Agency ("CRA") financial examiner, as well as Ms. Nadine Bisson, a CRA research and technology advisor, who both reviewed the DIS Project, also testified at the hearing.

[4] In these reasons, all references to statutory provisions are to provisions of the Act, unless otherwise indicated.

## II- ISSUES

[5] There are two issues in this appeal: 1) whether the activities undertaken by Indusol during the 2012 taxation year in respect of the DIS Project constitute SR&ED; and 2) whether expenses totalling $111,883 are deductible under section 37 as SR&ED expenditures and are qualified expenditures for the purposes of the calculation of the ITC under subsection 127(5). These expenses consist of an amount of salary totalling $104,578 paid to Mr. van Eijle and to Ms. Francine Clément, an amount totalling $3,901 for the purchase of a portable computer (the "Computer") and an amount totalling $3,404 for the renewal of a Microsoft Developer Network Platform licence (the "Licence").

## III- THE DIS PROJECT

*The 3D-Navigator system and the DIS*

[6] The DIS Project is an extension of another project, called the "3D-Navigator Electronic Navigation System" (the "3D-Navigator system") project, carried out during previous years by Indusol. The 3D-Navigator system, the project for which started in 1999, is an electronic marine navigation system for commercial vessels that allows for either 2D or 3D perspectives. Over the years, the 3D-Navigator system was improved to include more features, including the DIS. As the 3D-Navigator system was the display system for the DIS, changes had to be made to the 3D-Navigator system to accommodate the DIS.

[7] The DIS is an aid to navigation that provides real-time graphical representation of anticipated underwater obstacles and conditions for a vessel. The DIS addresses multiple factors, such as ship dynamics, channel dynamics and the behaviour of vessels. It calculates and indicates the distance between the deepest point of the vessel and the bottom of the channel (which is referred to as "under-keel clearance" or "UKC") in order to facilitate navigation of vessels. The

DIS also takes into account the squat, which is the extra sinkage of a vessel created by the speed of the vessel through the water. The formulas to calculate the squat in various situations were originally developed by the Université Laval in 2002.

[8] Before the implementation of the DIS, no real-time information about UKC during the transit of a vessel was available. When a vessel was in Canadian waters, the officer in charge of that vessel would use charts prepared by the Canadian Hydrographic Service ("CHS"), which gave an average water level without indicating what obstacles might lay in front of the vessel, while transiting the St. Lawrence Seaway (the "Seaway").

*The Origin and development of the DIS*

[9] The idea for the DIS originated in 2003 during a meeting between Indusol and Canadian Steamship Lines ("CSL") at a time when CSL was looking for better UKC information for vessels transiting the St. Mary's River. To meet the request made by CSL, Indusol enhanced its 3D-Navigator system to include DIS capability. Throughout 2008 and 2009, Indusol tested its expanded system on board ships. By 2010, every ship using the enhanced system was allowed additional draft of three inches following approval of an application for authorization to use the DIS, which enabled ship operators to load more cargo onto ships. The draft is the depth to which a vessel is immersed when carrying a given load.

*The Timeline*

[10] In March 2009, Mr. van Eijle and a representative of CSL met with the American and Canadian seaway authorities, namely the Saint Lawrence Seaway Development Corporation and the Saint Lawrence Seaway Management Corporation (together, the "Seaway Authorities") and various industry players, to propose the DIS Project on the basis of work done by Indusol in 2003 and 2004 in the St. Mary's River (the timeline at Exhibit A-24, p. 21 and following; a timeline can also be found in Exhibit A-28, p. 15 and following) (the "Timeline").

[11] The DIS Project objective was described as being to determine whether it is possible for a vessel to transit from Montreal to Lake Erie (via Lake Ontario and the Welland Canal) consistently at a draft of 8.15 m with a minimum UKC of 30 cm.

[12] As part of the DIS Project, the Seaway Authorities required the standardization of the DIS technology and the development of DIS implementation specifications to prove that the DIS technology was safe. The purpose of the DIS implementation specifications was to increase the safety of navigation in the Seaway by increasing knowledge about the UKC of vessels transiting the Seaway. In November 2010, the Seaway Authorities published a first draft of the DIS implementation specifications that was clearly unsatisfactory.

[13] Later in November 2010, a workgroup which included industry players (system manufacturers and shipping enterprises) and representatives of the Seaway Authorities, as well as Mr. van Eijle and Mr. O'Brien of Idon Technologies (the "DIS Workgroup") was formed and met for the first time. The objective of the DIS Workgroup was to oversee the process for the drafting of the DIS implementation specifications, including the various conformance test procedures. Since the first draft prepared by the Seaway Authorities was clearly unsatisfactory, Mr. van Eijle, through Indusol, volunteered to act as the technical reference for the drafting of these implementation specifications, and Mr. O'Brien was hired to actually write them.

[14] Throughout 2011, various drafts of the DIS implementation specifications were prepared and posted on the Seaway Authorities' websites for public comment, and various meetings of the DIS Workgroup were held. The Seaway Authorities accepted that some testing of the DIS be done by Indusol in the Seaway. After each round of publication, the DIS Workgroup met to resolve any concerns raised, and additional research was done to that end.

[15] However, in mid-July 2011, the Saint Lawrence Seaway Development Corporation (the US Seaway authority) suspended all overdraft transit through the Seaway until standards were developed and then approved to be part of the Seaway regulations.

[16] In August 2011, a first draft of DIS test data specifications was prepared.

[17] From September 2011 to March 2012, according to the Timeline, Indusol spent most of its time in the creation and testing of the procedures for the verification of the DIS implementation specifications. The conformance testing procedure was created and consisted of a total of 135 tests.

[18] On March 15, 2012, the Seaway Authorities approved the DIS implementation specifications. The final version of the DIS implementation

specifications was published on that same day. On March 17, 2012, LRQA Inc. (part of Lloyds International) certified that Indusol's DIS complied with the implementation specifications.

[19] In July 2012, the DIS implementation specifications and the DIS conformance tests were published by the Seaway Authorities and became applicable for waterways between Montreal and Lake Ontario and for the Welland Canal. Mr. van Eijle adduced as evidence Exhibit A-11: "Implementation Specifications – a Draught Information System for the St. Lawrence Seaway" (the "DIS implementation specifications"), and Exhibit A-12: "Implementation Specifications – a Draught Information System for the St. Lawrence Seaway, Test data specifications" (the "DIS conformance tests").

## IV- POSITIONS OF THE PARTIES

### 4.1 Appellant's position

[20] Indusol's activities can be classified as either applied research or experimental development within the meaning of the definition of SR&ED. Indusol's work with respect to the DIS in the 2012 taxation year satisfied the CRA's criteria for considering work to be SR&ED. Those criteria are: (i) scientific or technological uncertainty; (ii) scientific or technological advancement; and (iii) scientific and technical content. SR&ED activities included prototyping, specification development, marine industry peer evaluation and an independent verification by LRQA Inc.

[21] As regards applied research, Indusol's research results were published in the DIS implementation specifications and the DIS conformance tests, and in various articles.

[22] As regards experimental development, Indusol tested the research on board CSL vessels and integrated the research into the 3D-Navigator system in order to evaluate the functionality of the DIS. This experimental development made incremental improvements to the 3D-Navigator system and allowed vessels to navigate safely with a draft of 8.15 m and a minimum UKC of only 30 cm. The introduction of the DIS technology is a very great improvement to marine navigation.

[23] The Appellant is of the view that all expenditures claimed are reasonable, are deductible under section 37 as SR&ED expenditures and are qualified expenditures for the purposes of the ITC.

4.2 Respondent's position

[24] The DIS Project does not qualify as SR&ED. The criteria developed by the case law in order for an activity to qualify as SR&ED under the Act are not met in the case at bar. The Appellant did not submit any evidence on the nature of the activities carried on by Indusol during the 2012 taxation year. The evidence does not show how the SR&ED was conducted, what methodology was used or whether hypotheses were formulated.

[25] The evidence suggests that the 3D-Navigator system with DIS capabilities was operating in 2008, 2009 and 2010. In 2010, the Seaway Authorities decided to develop, and proceeded with the drafting of, the DIS implementation specifications, which set out the minimum requirements for a certified DIS to be used in the Seaway. From 2010 to 2012, Indusol participated in the development of both the implementation specifications and the DIS conformance tests. However, drafting the DIS implementation specifications and developing the DIS conformance tests at the request of regulatory authorities cannot be considered as the resolution of technological uncertainties. The DIS implementation specifications were not prepared in order to advance the technology because the DIS technology was already available by 2010.

[26] The Respondent argues that the salaries are not SR&ED expenditures under section 37 because the Appellant's claim with regard thereto was extremely general, without any documentation or evidence to support the estimate. Furthermore, the expenses claimed for the cost of the Licence and the Computer are not deductible under section 37 since the requirements of the Act are not met. Furthermore, these expenses are not qualified expenses for the purposes of the ITC.

## V- ANALYSIS

[27] For the determination of the issues in this appeal, the Act has created a two-part test. First, I have to determine whether the activities undertaken by Indusol during the 2012 taxation year in respect of the DIS Project meet the criteria of the definition of SR&ED as set in subsection 248(1). The Appellant bears the burden of showing, on a balance of probabilities, that its activities undertaken in

the 2012 taxation year with respect to the DIS Project constitute SR&ED. If those activities do not constitute SR&ED, that is the end of the analysis. However, if the activities meet the criteria set out in subsection 248(1), I must determine whether expenditures incurred by Indusol are deductible under section 37 as expenditures on or in respect of SR&ED and whether those expenditures are qualified expenditures for the purposes of the ITC (*Zeuter Development Corporation v. The Queen*, 2006 TCC 597, at para. 20).

5.1 SR&ED: Law and case law

[28] SR&ED is defined in subsection 248(1) as follows:

| | |
|---|---|
| **scientific research and experimental development** means systematic investigation or search that is carried out in a field of science or technology by means of experiment or analysis and that is | **activités de recherche scientifique et de développement expérimental** Investigation ou recherche systématique d'ordre scientifique ou technologique, effectuée par voie d'expérimentation ou d'analyse, c'est-à-dire: |
| **(a)** basic research, namely, work undertaken for the advancement of scientific knowledge without a specific practical application in view, | **a)** la recherche pure, à savoir les travaux entrepris pour l'avancement de la science sans aucune application pratique en vue; |
| **(b)** applied research, namely, work undertaken for the advancement of scientific knowledge with a specific practical application in view, or | **b)** la recherche appliquée, à savoir les travaux entrepris pour l'avancement de la science avec application pratique en vue; |
| **(c)** experimental development, namely, work undertaken for the purpose of achieving technological advancement for the purpose of creating new, or improving existing, materials, devices, products or processes, including incremental improvements thereto, | **c)** le développement expérimental, à savoir les travaux entrepris dans l'intérêt du progrès technologique en vue de la création de nouveaux matériaux, dispositifs, produits ou procédés ou de l'amélioration, même légère, de ceux qui existent. |
| and, in applying this definition in respect of a taxpayer, includes | Pour l'application de la présente définition à un contribuable, sont compris parmi les activités de recherche scientifique et de développement expérimental: |
| **(d)** work undertaken by or on behalf of the taxpayer with respect to engineering, design, operations | **d)** les travaux entrepris par le contribuable ou pour son compte relativement aux travaux de génie, à |

| | |
|---|---|
| research, mathematical analysis, computer programming, data collection, testing or psychological research, where the work is commensurate with the needs, and directly in support, of work described in paragraph (a), (b), or (c) that is undertaken in Canada by or on behalf of the taxpayer, | la conception, à la recherche opérationnelle, à l'analyse mathématique, à la programmation informatique, à la collecte de données, aux essais et à la recherche psychologique, lorsque ces travaux sont proportionnels aux besoins des travaux visés aux alinéas a), b) ou c) qui sont entrepris au Canada par le contribuable ou pour son compte et servent à les appuyer directement. |
| but does not include work with respect to | Ne constituent pas des activités de recherche scientifique et de développement expérimental les travaux relatifs aux activités suivantes: |
| **(e)** market research or sales promotion, | **e)** l'étude du marché et la promotion des ventes; |
| **(f)** quality control or routine testing of materials, devices, products or processes, | **f)** le contrôle de la qualité ou la mise à l'essai normale des matériaux, dispositifs, produits ou procédés; |
| **(g)** research in the social sciences or the humanities, | **g)** la recherche dans les sciences sociales ou humaines; |
| **(h)** prospecting, exploring or drilling for, or producing, minerals, petroleum or natural gas, | **h)** la prospection, l'exploration et le forage fait en vue de la découverte de minéraux, de pétrole ou de gaz naturel et leur production; |
| **(i)** the commercial production of a new or improved material, device or product or the commercial use of a new or improved process, | **i)** la production commerciale d'un matériau, d'un dispositif ou d'un produit nouveau ou amélioré, et l'utilisation commerciale d'un procédé nouveau ou amélioré; |
| **(j)** style changes, or | **j)** les modifications de style; |
| **(k)** routine data collection. | **k)** la collecte normale de données. |

[29] The case law has established five criteria for determining whether a particular activity qualifies as SR&ED. These criteria were laid down by Justice Bowman, as he then was, in *Northwest Hydraulic Consultants Ltd. v. R.* ([1998] 3 C.T.C. 2520 (TCC), at para. 16 [*Northwest Hydraulic*]).

[30] In establishing these criteria, Justice Bowman reviewed Information Circular 86-4R3 dated May 24, 1994 (the "Circular") and stated that, generally, it was a useful and reliable guide (*Northwest Hydraulic*, at para. 15).

[31] As regards the application of the criteria, Justice Bowman also commented that "[t]he tax incentives given for doing SRED are intended to encourage scientific research in Canada . . . As such the legislation dealing with such incentives must be given 'such fair, large and liberal construction and interpretation as best ensures the attainment of its objects'". (*Northwest Hydraulic*, at para. 11)

[32] These same criteria were later approved by the Federal Court of Appeal in two subsequent cases, *RIS-Christie Ltd. v. R.* ([1999] 1 C.T.C. 132, at para. 10 [*RIS-Christie*]) and *CW Agencies Inc. v. The Queen* (2001 FCA 393, at para.17 [*CW Agencies*]).

[33] The Federal Court of Appeal summarized these criteria in *CW Agencies* as follows:

> 1. Was there a technological risk or uncertainty which could not be removed by routine engineering or standard procedures?
>
> 2. Did the person claiming to be doing SRED formulate hypotheses specifically aimed at reducing or eliminating that technological uncertainty?
>
> 3. Did the procedure adopted accord with the total discipline of the scientific method including the formulation[,] testing and modification of hypotheses?
>
> 4. Did the process result in a technological advancement?
>
> 5. Was a detailed record of the hypotheses tested, and results kept as the work progressed?

## 5.2 SR&ED: the DIS Project

*Activities carried on by Indusol during the 2012 taxation year*

[34] The evidence showed that Mr. van Eijle, through Indusol, volunteered in November 2010 to be the technical reference for the drafting of the DIS implementation specifications and the development of the DIS conformance tests, and that he did so mainly for two reasons. The first reason was that he wanted to document Indusol's SR&ED efforts made during the previous years in developing the DIS. The second was that he wanted to be in control of the process for creating the implementation specifications and the related conformance tests.

[35] As indicated in a letter from Indusol to the CRA dated October 22, 2013 (Exhibit A-26, p.13): "There were no Seaway specifications; it was Indusol who proposed to the Seaway the results of their SR&ED effort of previous years which allowed ships to make better use of the available water column. The Seaway insisted the results had to be translated into specifications to be published as part of the Seaway regulations."

[36] The evidence also showed that during the first part of the 2012 taxation year (that is, from April to September 2011), Mr. van Eijle boarded ships to test various things. He also proceeded with data collection on such matters as what mariners prefer with respect to alarms, what information is needed and how that information is displayed. From April to December 2011, Mr. van Eijle made forty-two trips to board ships for the purpose of conducting on-board testing. From September 2011 to March 2012, Mr. van Eijle devoted most of his time to creating, testing and verifying the conformance testing procedure for the DIS implementation specifications.

*The state of the DIS at the beginning of the 2012 taxation year*

[37] On the evidence adduced at the hearing, I find that a prototype of the 3D-Navigator system with some DIS capabilities was already available by 2010 and before, but only within a limited area of the Seaway.

[38] An article in the *Great Lakes Seaway Review* titled "Draft Information System Approved" (Exhibit A-19, pp.13-14) suggests that the DIS technology already existed before the beginning of the 2012 taxation year and that the activities undertaken by Indusol in the 2012 taxation year involved writing the DIS implementation specifications and getting its DIS technology approved.

[39] The articles states (pp.13-14):

> To meet requests by CSL, Indusol enhanced its 3D-Navigator to include DIS capability. Throughout 2008 and 2009, the company tested its expanded product onboard ships in the system. By 2010, every ship using the enhanced system was granted permission to take advantage of the three inches of additional draft after they applied.
>
> . . .
>
> Based on positive results, formal review began. In 2011, the specifications for the technology were written in accordance with the ISO-IEC Directives, Part 2, "Rules for the Structure and Drafting of International Standards."

[40] Furthermore, during his cross-examination, Mr. van Eijle acknowledged that in 2008 and 2009 some of the DIS capabilities were already integrated into the 3D-Navigator system, but for very limited use. In the beginning, the DIS was only allowed to be used in the South Shore Canal from Cote-Sainte-Catherine to Saint-Lambert. Further, only some of the DIS capabilities were available. For example, the water level data had to be manually input into the system. Slowly, over time, the area expanded, and more tests were done throughout 2010 and 2011 to test new features.

*The DIS Project: qualification as SR&ED in the 2012 taxation year*

[41] For the following reasons, after reviewing the evidence adduced at the hearing, I find that, on a balance of probabilities, the activities undertaken by Indusol during the 2012 taxation year in respect of the DIS Project do not constitute SR&ED. Even though I find that some technological uncertainties within the meaning of the SR&ED criteria existed in respect of the squat issues, Indusol did not demonstrate that a methodical and systematic testing of the hypothesis or hypotheses was done and that it followed the total discipline of the scientific method, including the formulation, testing and modification of hypotheses in order to resolve those uncertainties, and that the process resulted in a technological advancement.

[42] The Appellant asserted that the activities undertaken during the 2012 taxation year were either applied research or experimental development within the meaning of the definition of SR&ED. Be that as it may, the five criteria as articulated by Justice Bowman in *Northwest Hydraulic* and later affirmed by the Federal Court of Appeal in *RIS-Christie* and *CW Agencies* must still be met in order for an activity to qualify as applied research or experimental development within the meaning of that definition. In a case where a taxpayer asserts that applied research was carried out, the references in the *Northwest Hydraulic* criteria to technological risk, uncertainty and advancement should therefore be considered as references to scientific risk and uncertainty, and the advancement of scientific knowledge (*Life Choice Ltd. v. The Queen*, 2017 TCC 21, para. 16). In these reasons, I will use the terms technological risk, technological uncertainty and technological advancement to also refer to scientific risk, scientific uncertainty and scientific advancement.

[43] Mr. van Eijle asserted as well that the DIS Project started in 2009 and that he had worked on the DIS Project during Indusol's 2010, 2011 and 2012 taxation years. However, in the case at bar, the question is whether experimental development or applied research activities were carried out by Indusol during the 2012 taxation year. Hence, the relevant activities are those carried on during the 2012 taxation year of Indusol, namely, between April 1, 2011 and March 31, 2012. However, the history of the DIS Project will still be relevant to making the determination (*Les Abeilles Service de Conditionnement Inc. v. The Queen*, 2014 TCC 313, at para. 152).

[44] Since, as shown by the evidence, the DIS was used in 2008 and 2009 in the South Shore Canal of the Seaway, I find that the fundamental technology for the DIS existed by then. However, it is unclear whether the technology could be easily implemented in other sections of the Seaway. Furthermore, as indicated by Mr. van Eijle, the DIS prototype was likely limited in its capabilities and more features needed to be developed and tested between 2010 and 2012. As Mr. van Eijle was also involved in developing the DIS implementation specifications during that same period of time, and given his testimony, which was credible, it is reasonable to accept that DIS prototypes were improved and modified during the period between 2010 and 2012 in order to comply with newly proposed or established standards. Hence, a review of the above-mentioned five criteria is warranted.

### *1- Was there a technological risk or uncertainty which could not be removed by routine engineering or standard procedures?*

[45] In *Northwest Hydraulic*, Justice Bowman clarified that the "technological risk or uncertainty" must be such that it "cannot be removed by routine engineering or standard procedures" and that if "the resolution of the problem is reasonably predictable using standard procedure or routine engineering there is no technological uncertainty". The term "routine engineering" refers to "techniques, procedures and data that are generally accessible to competent professionals in the field" (*Northwest Hydraulic*, at para. 16).

[46] In order to meet this criterion, the overall activity undertaken by Indusol during the 2012 taxation year must have involved technological risks or uncertainties which could not be removed by routine engineering or standard procedures.

[47] The Appellant identified several uncertainties and challenges which arose either in the 2012 taxation year or throughout the period from 2010 to 2012. According to the Respondent, these uncertainties and challenges were not technological uncertainties within the meaning of the SR&ED criteria, as many of the stated uncertainties had to do simply with decisions that the DIS Workgroup needed to make with respect to the DIS standards. Also, in some instances, Indusol did no more than identify the problems, which is not an SR&ED activity.

[48] For the reasons stated below, I find that, on a balance of probabilities, only some of the uncertainties raised with respect to the squat issues constitute technological uncertainties within the meaning of the SR&ED criteria. Other uncertainties and challenges identified by the Appellant do not constitute technological risks or uncertainties within the meaning of the SR&ED criteria.

(a) Gathering hydrographical data

[49] The Appellant identified in the charts prepared by the CHS deficiencies that prevented the DIS from functioning properly. The solution to this problem involved doing surveying and then producing new charts with greater accuracy, which work was performed by the Seaway Authorities and the CHS. Indusol then tested the new charts with the DIS system to ensure compatibility.

[50] I find that, while Indusol identified problems with the charts that prevented the DIS from functioning properly, it was not directly involved in resolving these issues. Simply identifying problems is not an SR&ED activity. Furthermore, nothing in the evidence suggests that doing surveying and producing new charts were things that could not be done through use of routine engineering or standard

procedures involving techniques and processes that were accessible to competent professionals.

[51] Therefore, I find that the uncertainties identified with respect to the charts are not technological uncertainties within the meaning of the SR&ED criteria.

(b) Hydraulics issues

[52] According to the Appellant, the uncertainties involved whether ships with a deep draft could get into and out of the locks safely without damaging the locks. The Seaway Authorities together with Indusol and CSL conducted experiments with deep draft. Given the successful results of the experiments, the Seaway Authorities committed to the DIS Project.

[53] There may have been uncertainty as to whether ships with deep draft could get into and out of the locks safely, and tests needed to be done in order to address the safety issue. However, the Appellant did not explain in any detail the experiments carried out by Indusol in that respect. Also, regardless of who carried out the experiments and which experiments were carried out, Indusol did not demonstrate that the uncertainties with respect to the hydraulics issues could not be removed by standard procedures.

[54] Therefore, I find that the uncertainties with respect to the hydraulics issues are not technological uncertainties within the meaning of the SR&ED criteria. Furthermore, the evidence showed that the Seaway Authorities committed to the DIS Project given the successful results of the experiments conducted in the locks. I find that, since the Timeline shows that the Seaway Authorities committed to the DIS Project in November 2010, the activities in question were carried on prior to November 2010, and not during the 2012 taxation year.

(c) Under-keel clearance (UKC)

[55] According to the Appellant, the uncertainties with respect to UKC involved whether it was safe to change the minimum UKC requirement in the Seaway from 60 cm to 30 cm. Previously, the Seaway Authorities had required a minimum UKC of 60 cm but Indusol convinced them that a minimum UKC of 30 cm would be acceptable if better charts and technologies were available on ships.

[56] Mr. van Eijle merely testified that he was able to convince the Seaway Authorities that vessels were able to transit safely with a minimum UKC of 30 cm.

There was no evidence adduced at the hearing as to whether any tests were performed to investigate the problem. In fact, this problem seemed more like something that required an administrative decision to be made by the Seaway Authorities given the availability of the DIS technology.

[57] Therefore, I find that the uncertainties raised with regard to UKC issues are not technological uncertainties within the meaning of the SR&ED criteria.

(d) Squat issues

[58] According to Mr. van Eijle, issues relating to squat (which is the extra sinkage of a vessel created by the speed of the vessel through the water) were the biggest challenges faced by Indusol in the DIS Project.

[59] The evidence showed that different squat formulas have to be used in various situations, depending on the type of ship, the type of channel, and speed ranges. Indusol tested the accuracy of squat formulas from different sources and decided to implement the formulas developed by the Université Laval in 2002. Furthermore, the evidence showed that Indusol had to determine how to implement and apply the squat formulas within the DIS.

[60] Even though the squat formulas used by Indusol were already available, I find that, on a balance of probabilities, there were still some technological uncertainties involved in the process for the implementation of the squat formulas within the DIS. These uncertainties with respect to the additional squat that occurs when two vessels meet in a channel could not be resolved by routine engineering or standard practices.

[61] Technological uncertainty within the meaning of the SR&ED criteria may occur in either of two ways: ". . . it may be uncertain whether the goals can be achieved at all; or the taxpayer may be fairly confident that the goals can be achieved, but may be uncertain which of several alternatives (i.e., paths, routes, approaches, equipment configurations, system architectures, circuit techniques, etc.) will either work at all, or be feasible to meet the desired specifications or cost targets, or both of these" (the Circular, at para. 2.10.2).

[62] The Appellant identified three uncertainties with respect to implementing the squat formulas in the DIS: (1) the speed of a vessel could not be easily measured because there was no solution for measuring the velocity of the current in real time; (2) the squat formula needed to be altered for different sections of the

channel; and (3) the additional squat that occurs when two vessels approach each other at different speeds has to be accounted for.

[63] According to Mr. van Eijle, the first major uncertainty in the implementation process was to ascertain how to measure the speed of a vessel through the water while taking into consideration the velocity of the current. Furthermore, Mr. van Eijle testified that there was no solution for measuring the velocity of the current in real time. Indusol proposed using a table in order to determine the velocity of the current. To calculate the actual speed through the water of a vessel navigating downstream, the velocity of the current would be added to the GPS speed of the vessel. To calculate the actual speed of a vessel navigating upstream, the velocity of the current would be deducted from the GPS speed of the vessel. Indusol was requested to test the proposal on board vessels, and the proposal was ultimately accepted.

[64] Regarding the first uncertainty, I find that, on a balance of probabilities, there was no technological uncertainty within the meaning of the SR&ED criteria, because I am not satisfied that the uncertainty could not be resolved using routine engineering or standard procedures. Mr. van Eijle testified that he proposed to use a table in order to determine the velocity of the current. No evidence was adduced at the hearing as to the difficulty involved in this method, or as to whether the table was readily available to competent professionals in the industry. Therefore, I find that the Appellant has not shown that this was a technological uncertainty which could not be removed by the application of routine engineering or standard procedures.

[65] According to Mr. van Eijle, the second major uncertainty was how to change the squat formulas according to the channel type during a ship’s transit. Indusol proposed dividing the Seaway into multiple sections and assigning a channel type to each section. When a vessel travelled in a certain section, the system would apply the appropriate squat formula for the section depending on the assigned channel type. Indusol was requested to test the proposal and this proposal was also ultimately accepted.

[66] As regards the second uncertainty, I find that, on a balance of probabilities, there was no technological uncertainty within the meaning of the SR&ED criteria because I am not satisfied that the uncertainty could not be resolved using routine engineering or standard procedures. The evidence showed that the various squat formulas developed by the Université Laval in 2002 took into account the different

channel types. I find that routine engineering or standard procedure could have been used to resolve that uncertainty.

[67] The third major uncertainty was how to take into account the increased squat when two vessels meet in a channel. Since the additional squat was uncertain, Indusol performed tests to measure the additional squat when two ships were traveling at different speeds. This additional squat was then added to the squat calculation.

[68] Concerning the third uncertainty, the evidence showed that the Université Laval's research did not include a method to calculate the additional squat when two vessels approach each other at different speeds. The Appellant was uncertain as to whether the proposed solutions would be effective in achieving the goals or desired specifications. Therefore, I find that, on a balance of probabilities, the evidence showed that there was technological uncertainty within the meaning of the SR&ED criteria.

[69] For these reasons, I find that, on a balance of probabilities, there was some technological uncertainty within the meaning of the SR&ED criteria as regards the implementation of the squat formulas within the DIS. This uncertainty was with respect to the additional squat when two vessels meet in a channel. I also find that Indusol carried out the above-described activities during the 2012 taxation year.

(e) User interface and display requirement

[70] According to Mr. van Eijle, the uncertainty involved with the user interface and the display requirement had to do with how to create an unambiguous and precise single display that showed all the relevant information and that did so without overwhelming the officer in charge of a vessel while still respecting international standards. In order to highlight and isolate a danger on the display, Indusol decided to use different colours to indicate unsafe water. Also, there was uncertainty about how far ahead, in terms of time, the system should look so that the officer in charge would have time to make appropriate decisions. Mr. van Eijle testified that six minutes was agreed upon by the DIS Workgroup, which was in accordance with international standards.

[71] Determining how to isolate danger on the display using different colours while respecting an international standard was a decision that needed to be made for the purposes of the DIS specifications. Since there is no evidence on whether any technological difficulty was involved in that decision, the issues raised cannot

be construed as technological uncertainties within the meaning of the SR&ED criteria. This is likely a matter of making an administrative decision for the purposes of the DIS implementation specifications rather than a technological issue. Further, the DIS Workgroup simply reached an administrative decision to use the international standard of six minutes for the look-ahead time.

[72] Therefore, I find that the uncertainties raised regarding the user interface and the display requirement issues are not technological uncertainties within the meaning of the SR&ED criteria.

(f) Water level information

[73] According to the Appellant, the uncertainty involved whether there was a backup system to measure the water level if the primary system failed. As a backup system, the Seaway Authorities negotiated agreements with power companies along the Seaway to use their sensors as backup sensors. A lot of work was done on the backup system to ensure that deep-draft vessels would receive the right information in the event of a system failure. Additionally, since the different organizations used different naming conventions, datums and units of measurement, the data needed to be reconciled in the DIS.

[74] Mr. van Eijle testified that a lot of work was done on the backup system, however it is unclear exactly what work was done and whether the work involved any technological uncertainty. If the solution to the backup system problem simply involved negotiating agreements with various power companies, the issue did not entail a technological uncertainty. Furthermore, the need to convert different naming conventions, datums and units of measurement cannot be considered a technological uncertainty because the issue most likely could have been resolved using routine engineering or standard procedures.

[75] Therefore, I find that uncertainties raised with respect to the water level information issues are not technological uncertainties within the meaning of the SR&ED criteria.

(g) Communication

[76] According to Mr. van Eijle, the uncertainty regarding communication had to do with how to transmit water level reports from shore to vessel over a wide-area network. The other challenge with respect to communication was, according to the Appellant, that the transmitted data could not take up more than 10% of the

available bandwidth of a particular radio channel. The solution was to use six-bit data instead of eight-bit data to transmit the message.

[77] In order to solve that issue, Indusol proposed the use of an existing technology called the Automatic Identification System (the "AIS"). The AIS was used for transmitting local information within a 20-mile range, but was never intended to be used in a wide-area network. Indusol recognized that the AIS could be used as a way to transmit real-time water level information.

[78] I find that using the AIS for the purpose of transmitting water level reports consisted in adapting a known technology to a new situation. As indicated in paragraph 4.3 of the Circular, "[a]dapting a known technology or practice to new situations is ineligible when the routes for the progression of work that will lead to successful solutions to a technological or engineering problem can be identified in standard practice. In other words, if the project involves directly adapting a known technology to a new situation, when it is reasonably certain that the approach will work, it is ineligible."

[79] Overall, I find that there is not sufficient evidence to indicate any uncertainty in adapting the AIS technology to the DIS. During 2010 and 2011, on the basis of work done by Indusol, the Seaway Authorities made changes to the water level stations, added water level stations, and made changes to the AIS at the water level stations, which fundamentally changed the use of the AIS. There is no evidence on whether any uncertainty was involved. I also find that the activities were not carried on during the 2012 taxation year, but in 2010 and 2011. Furthermore, the issue arising from not being able to exceed 10% of the bandwidth was resolved by packing the data into smaller sizes, work that is more likely to be considered as routine engineering or standard procedure.

[80] Therefore, I find that the uncertainties raised regarding communication issues are not technological uncertainties within the meaning of the SR&ED criteria.

(h) Alarm and alert issues

[81] According to Mr. van Eijle, the uncertainty here involved the determination of the type of alarms that should be displayed on the screen of the 3D-Navigator system. There were lengthy discussions among the DIS Workgroup members to determine the alarm requirements.

[82] Deciding what alarms to display on the screen is an administrative decision that does not involve any technological issue.

[83] Therefore, I find that uncertainties raised regarding the alarm and alert issues are not technological uncertainties within the meaning of the SR&ED criteria.

(i) Data recording

[84] According to Mr. van Eijle, it was important that the whole voyage of a vessel on the Seaway be recorded. However, the capabilities of the AIS were limited in this regard because it overrides itself every six hours, so it could not be used. Mr. van Eijle testified that nowadays vessels can keep months of recording, which takes up very little space on a hard drive.

[85] At the hearing, no evidence was adduced concerning the activities engaged in by Indusol with respect to data recording, or concerning any proposal made or any tests performed with respect thereto.

[86] I therefore find that, since no evidence was adduced at the hearing, uncertainties raised with regard to the data recording issues are not technological uncertainties within the meaning of the SR&ED criteria.

(j) Computer hardware

[87] The evidence showed that the 3D-Navigator requires computer hardware on board the vessel. Indusol needed to determine how fast the computer had to be to satisfy the required update rates for data. Additionally, the computer had to be able to withstand the harsh conditions — vibration, dirt and heat — on board vessels. Indusol used a portable computer to test whether it was more reliable than a conventional computer for the purposes of the 3D-Navigator with DIS capability.

[88] I find that determining whether a computer was fast or reliable enough for the purposes of the 3D-Navigator with DIS capability does not involve a technological uncertainty. This could have been accomplished by simply testing and using the computer on board a ship, which is nothing more than routine engineering or standard procedure.

[89] Therefore, I find that uncertainties raised with respect to the computer hardware issues are not technological uncertainties within the meaning of the SR&ED criteria.

### *2- Did Indusol formulate hypotheses specifically aimed at reducing or eliminating the technological uncertainty?*

[90] As indicated by Justice Bowman in *Northwest Hydraulic* (at para. 16), the second criterion, i.e., the formulation of hypotheses aimed at reducing the technological uncertainties, involves the following five-stage process:

(i) The observation of the subject matter of the problem;
(ii) The formulation of a clear objective;
(iii) The identification and articulation of the technological uncertainty;
(iv) The formulation of a hypothesis or of hypotheses designed to reduce or eliminate the uncertainty; and
(v) The methodical and systematic testing of the hypothesis or hypotheses.

[91] According to the Timeline, during a DIS Workgroup meeting held on June 13, 2011, the uncertainties associated with the squat issues were identified. Indusol proposed potential solutions to address these uncertainties. At the hearing, Mr. van Eijle further explained the various proposals.

[92] According to the Respondent, there is no evidence that the Appellant formulated any hypothesis designed to reduce or eliminate the uncertainties or that it conducted a methodical and systematic testing of the hypothesis. The evidence showed that Mr. van Eijle would identify a problem and try to resolve it, but the process involved is unclear.

[93] On the evidence adduced at trial, I find that, on a balance of probabilities, hypotheses were formulated that were designed to reduce or eliminate the technological uncertainties involved with respect to the squat issues. However, for the reasons explained below in the section dealing with the third criterion, I am not convinced that Indusol conducted a methodical and systematic testing of the hypotheses. Accordingly, I find that the second criterion is not met, as it requires the methodical and systematic testing of hypotheses.

### *3- Did the procedure adopted accord with the total discipline of the scientific method, including the formulation, testing and modification of hypotheses?*

[94] With regard to the third criterion, the adoption of the scientific method, Justice Bowman in *Northwest Hydraulic* (at para. 16) clarified that what is important is the adoption of the entire scientific method with a view to removing a technological uncertainty through the formulation and testing of innovative and untested hypotheses.

[95] Furthermore, the Federal Court of Appeal stated in *RIS-Christie* that the taxpayer must established that tests were performed and conducted in a systematic fashion. The Court further noted (at para. 14) that ". . . [a]lthough both documentary and viva voce evidence are admissible, the only sure-fire way of establishing that scientific research was undertaken in a systematic fashion is to adduce documentary evidence which reveals the logical progression between each test and preceding or subsequent tests." And as indicated by Justice Bowman in *Northwest Hydraulic* (at para. 16), one must ask the following question: "Did the procedures adopted accord with established and objective principles of scientific method, characterized by trained and systematic observation, measurement and experiment, and the formulation, testing and modification of hypotheses?"

[96] In *RIS-Christie*, the Federal Court of Appeal stated in paragraph 14 that the requirement of "systematic" research is a higher threshold than simply requiring that research, including testing, be conducted.

[97] Furthermore, as indicated by Justice Sarchuk in *Sass Manufacturing Limited v. M.N.R.*, 88 DTC 1363 (at 1371), [1988] T.C.J. No. 409 (QL), a systematic investigation ". . . connotes the existence of controlled experiments and of highly accurate measurements and involves the testing of one's theories against empirical evidence. . . . This . . . would include repeatable experiments in which the steps, the various changes made and the results are carefully noted. . . ."

[98] The Respondent argues that there is no evidence to show that the procedures adopted accorded with the established and objective principles of the scientific method. There is no evidence suggesting that the Appellant performed systematic observation, measurement and experiment to test and modify any hypothesis.

[99] In the case at bar, I am not convinced that the procedure adopted by Indusol accorded with the total discipline of the scientific method. The Appellant simply did not adduce sufficient evidence to meet this criterion.

[100] According to the Timeline, the Appellant identified uncertainties with respect to the squat formulas and identified as well the potential solutions and the final accepted solutions. Even though the Timeline mentions that Indusol was requested to conduct research and testing on board vessels, there is no information on what tests and research were actually carried out.

[101] Mr. van Eijle's testimony about how Indusol tested the proposed solutions and what the results of the tests were was also very vague. For example, with respect to calculating the additional squat when two ships approach each other in a channel, Mr. van Eijle testified that "[s]ince we don't know exactly what it is, we, out of testing, created a table with speed ranges. . . . We went on board and measured and measured and measured. . . ." (Transcript of February 10, 2020, at p.101, lines 10-11, 21-22). There was no evidence about any controlled experiments to test the proposed solution against empirical evidence. With respect to calculating the speed of a ship taking into consideration the velocity of the current, Mr. van Eijle explained during the trial the solution ultimately arrived at, but there was no evidence as to whether systematic observation, measurement, and experiment were performed with a view to modifying the proposed solution which led to the final solution.

[102] For these reasons, I am not convinced that the procedure adopted by Indusol accorded with the total discipline of the scientific method. The Appellant simply did not adduce sufficient evidence to meet this criterion. Therefore, for these reasons, I find that, on a balance of probabilities, the third criterion is not met.

### *4- Did the process result in a technological advancement?*

[103] Regarding the fourth criterion — whether the process resulted in a technological advancement — Justice Bowman in *Northwest Hydraulic* (at para. 16) indicated that it referred to "an advancement in the general understanding . . . [for] persons knowledgeable in the field." Justice Bowman further indicated that "[t]he rejection after testing of [a] hypothesis is nonetheless an advance in that it eliminates one hitherto untested hypothesis", adding that failure may reinforce "the measure of the technological uncertainty."

[104] According to the Circular, the activities ". . . must generate information that advances our understanding of scientific relations or technologies. In a business context, this means that when a new or improved product or process is created, it must embody a scientific or technological advancement in order to be eligible" (at para. 2.10.1). Furthermore, the activities must ". . . seek to advance the taxpayer's technological knowledge base" (Circular, at para. 2.13). Further, the technological advancement achieved only has to be slight in order to qualify. Additionally, it is well established that achieving a technological advancement ". . . would require removing the element of technological uncertainty through a process of systematic investigation" (Circular, at para. 2.13).

[105] According to the Appellant, scientific and technological advancements were achieved through the DIS Project. Indusol created algorithms and technologies that allowed vessels equipped with the DIS to transit the Seaway with a minimum UKC of 30 cm and a maximum draft of 8.15 m. The AIS messaging system could be used to transmit real-time water level reports to vessels. The visualization of real-time water depth for the officer in charge of a vessel was a breakthrough in marine navigation display technology. Furthermore, the DIS allowed mariners to know the actual UKC in real time with an accuracy of within 10 cm.

[106] According to the Respondent, there was no technological advancement in the 2012 taxation year. The 3D-Navigator with DIS capability was already available in 2010. The technological advancement had already occurred in the years prior to the 2012 taxation year. Indusol's activities in 2011 and 2012 focused on developing the standards for the DIS.

[107] Overall, I find that Mr. van Eijle was a credible witness when he testified on the successful application of the DIS technology in the context of marine navigation. However, as indicated above, the evidence suggests that much of the work to advance the technology was completed by 2010, and only part of the implementation of the squat formulas qualifies as involving a technological uncertainty within the meaning of the SR&ED criteria in the 2012 taxation year. I find that some incremental advancements were achieved in the 2012 taxation year in relation to the DIS, but no advancement within the meaning of the SR&ED criteria. A technological advancement for SR&ED purposes requires the removal of technological uncertainties through a process of systematic investigation. As the Appellant has not adduced sufficient evidence to demonstrate that systematic investigation was undertaken during the 2012 taxation year, I simply cannot conclude that this criterion is met.

[108] For these reasons, I find that, on a balance of probabilities, the fourth criterion is not met.

### *5- Was a detailed record of the hypotheses tested, and results kept as the work progressed?*

[109] The last criterion, the keeping of a detailed record of the hypotheses and results, is not explicitly required by the Act or the regulations thereunder. However, the jurisprudence indicates that it is implicit in the notion of "scientific method" and in the fact that the expression "systematic investigation" appears in the opening words of the definition.

[110] In *Northwest Hydraulic* (at para. 16), Justice Bowman clarified that "a detailed record of the hypotheses, tests and results [must] be kept . . . as the work progresses." However, as indicated by this Court in *Formadrain Inc. v. The Queen* (2017 TCC 42, at para. 118) and by the Federal Court of Appeal in *RIS-Christie* (at paras. 14 and 15), it is not mandatory that the evidence be documentary, and testimonial evidence may be presented. Although there are risks associated with not adequately documenting a step in an SR&ED project, testimonial evidence is acceptable.

[111] According to the Respondent, there is no detailed record of the hypotheses, tests and results. Although the Appellant submitted many exhibits, the documents do not indicate or explain any application of the scientific method.

[112] According to the Appellant, all of Indusol's SR&ED efforts were documented in the DIS implementation specifications (Exhibit A-11) and the DIS conformance tests (Exhibit A-12).

[113] After examining these two documents, I find that they are not contemporaneous detailed records of the hypotheses formulated and tests performed by Indusol; in other words, they are not records such as those described in *Northwest Hydraulic*.

[114] The overall objective of the DIS implementation specifications was to develop a standard that specified how the UKC of a vessel could be calculated by considering water level, bottom depth and ship dynamics. Mr. van Eijle confirmed that the purpose of this document was to ensure that any DIS system used on the Seaway would meet certain minimum requirements or would calculate the UKC in a specific manner. The DIS implementation specifications set out the requirements

for each aspect of the DIS, such as data specifications, UKC calculation requirements and operational specifications. They do not provide detailed records of the hypotheses tested by Indusol and of the test results.

[115] In order for a marine navigation product with DIS capabilities to be certified, it must be proven to comply with the DIS implementation specifications. A series of conformance tests must be performed to demonstrate that the product meets the requirements in the specifications. Exhibit A-12 documents the conformance testing procedures established for that purpose. This document does not record the hypotheses tested by Indusol and the test results. It is merely a set of testing procedures that must be followed in order to determine whether a DIS conforms with the established standards.

[116] The Appellant also provided several charts which purportedly document work done by Indusol:

- Exhibit A-6: Comments by Indusol Industrial Control Ltd. on Draft Working Document Version 1.00 (dated January 30, 2011)
- Exhibit A-8: Comments on CD 1 of a Draught Information System for the St. Lawrence Seaway (dated January 18, 2011)
- Exhibit A-9: Comments on CD 1 of a Draught Information System for the St. Lawrence Seaway (dated January 18, 2011, updated August 21, 2011)
- Exhibit A-10: Resolution of Comments on CD 2 of a Draught Information System for the St. Lawrence Seaway (dated August 24, 2011)

[117] After reviewing those charts, I am not satisfied that they contain hypotheses tested and test results. The charts are records of Indusol's comments on specific provisions of the draft DIS implementation specifications and the DIS conformance tests. In some instances, the proposed changes to the provisions and the final decisions of the DIS Workgroup are included, but I do not find that any of the documents include hypotheses tested and test results.

[118] Therefore, for these reasons, I find that, on a balance of probabilities, the fifth criterion is not satisfied.

5.3 SR&ED expenditures and qualified expenditures for ITC purposes

[119] In computing a taxpayer's business income, one may deduct in accordance with section 37 expenditures on SR&ED and claim the related ITC in accordance with subsection 127(5). Having found that the activities carried on by Indusol during the 2012 taxation year in respect of the DIS Project were not SR&ED, I need not determine whether the expenses claimed by Indusol were deductible under section 37 and constituted qualified expenditures for ITC purposes.

[120] However, for the following reasons, were I have concluded that the activities undertaken by Indusol during the 2012 taxation year in respect of the DIS Project were SR&ED, which I have not, I would find that the salary expenses and the cost of the Computer would not be deductible under section 37 and would not be qualified expenditure for ITC purposes; in such a scenario, only the cost of the Licence would be deductible and would be a qualified expenditure for ITC purposes.

[121] Indusol claimed in respect of the DIS Project the following SR&ED expenditures, totalling $111,883:

- Salary - Robbert J. van Eijle : $62,747
- Salary - Francine Clément : $41,831
- Capital expenditure - Computer : $3,901
- Materials consumed - Licence: $3,404

[122] Furthermore, Indusol claimed ITC of $49,224 in respect of those expenses.

[123] Since Indusol has elected to use the proxy method for the purposes of SR&ED (subsection 37(10)), the expenditures that Indusol may deduct under paragraph 37(1)(a) (subject to clause 37(8)(a)(ii)(B)) are expenditures of a current nature made in the year, which would include:

- Expenditures for the lease of premises, facilities or equipment for the prosecution of SR&ED in Canada, other than an expenditure in respect of general purpose office equipment or furniture;
- A portion of an expenditure made in respect of an expense incurred in the year for salary or wages of an employee who is directly engaged in SR&ED in Canada that can reasonably be considered to relate to such work having regard to the time spent by the employee thereon;

- The cost of materials consumed or transformed in the prosecution of SR&ED in Canada.

[124] Furthermore, there may be deducted under paragraph 37(1)(b) (subject to clause 37(8)(a)(ii)(B)) expenditures of a capital nature for the provision of premises, facilities or equipment where it was intended either that it would be used during all or substantially all of its operating time in its expected useful life for the prosecution of SR&ED or that all or substantially all of its value would be consumed in the prosecution of SR&ED.

[125] ITC will be calculated by taking into account the SR&ED qualified expenditure pool, which includes any qualified expenditure as that phrase is defined in subsection 127(9). Qualified expenditures will include expenditures of a current nature described in paragraph 37(1)(a), expenditures of a capital nature described in subparagraph 37(1)(b)(i) and the prescribed proxy amount of the taxpayer (i.e., 65% of the amount in respect of the salary or wages of an employee who is directly engaged in SR&ED that can reasonably be considered to relate to the SR&ED – subsection 2900(4) *Income Tax Regulations*).

*Salary paid to Mr. van Eijle and Ms. Clément*

[126] As indicated above, an expenditure for salary will be deductible under paragraph 37(1)(a) if it qualifies as ". . . an expense incurred in the year for salary or wages of an employee who is directly engaged in [SR&ED] in Canada that can reasonably be considered to relate to such work having regard to the time spent by the employee thereon".

[127] Whether an employee is directly engaged in SR&ED will be a function of the tasks performed by the employee and is a question of fact; the amount deductible as SR&ED expenditures will be a function of the time spent on SR&ED tasks. If the employee directly conducts the SR&ED experiments or carries on the the SR&ED activities, he will be considered as directly engaged in SR&ED. In that respect, one should consider paragraph (d) of the definition of SR&ED in subsection 248(1), which includes in SR&ED:

> (d) work undertaken by or on behalf of the taxpayer with respect to engineering, design, operations research, mathematical analysis, computer programming, data collection, testing or psychological research, where the work is commensurate with the needs, and directly in support, of work described in paragraph (a), (b), or (c) that is undertaken in Canada by or on behalf of the taxpayer.

[128] In order to determine whether expenditures for salary are deductible under paragraph 37(1)(a) and are qualified expenditures for ITC purposes, the Court must first determine the nature of the tasks performed by the employee and the time spent on such tasks.

[129] For the following reasons, even if I had concluded that some SR&ED activities were carried on by Indusol during the 2012 taxation year, which I have not, I would find that the expenses for the salaries paid to both Mr. van Eijle and Ms. Clément do not qualify as SR&ED expenditures under paragraph 37(1)(a) and are not qualified expenditures for ITC purposes. Indusol has failed to convince me, on a balance of probabilities, that the salaries paid to Mr. van Eijle and Ms. Clément met the requirements of paragraph 37(1)(a).

[130] In the first place, I am not satisfied that Ms. Clément was directly engaged in SR&ED activities. The various duties performed by her, such as proof reading documents and driving Mr. van Eijle to and from vessels, are not tasks that are directly related to SR&ED. However, testing new ideas and integrating the new ideas into the DIS could be considered as being so related, but there is no evidence as to how much time Ms. Clément actually devoted to such tasks, which leads to the second and the more detrimental problem in the case at bar, namely, the lack of documentation to support the claims made by Indusol, a problem that exists with respect to the salaries of both Mr. van Eijle and Ms. Clément.

[131] The evidence has established that Mr. van Eijle does all the technical development, software development and service work but does not perform any administrative tasks; these were carried out by Ms. Clément. He testified that a lot of work done on board vessels was statistical work done for the purposes of collecting information. He would board vessels once a week or every other week during the period from April to December, but not during the period from December to April. He testified that he made 42 trips in a 33-week period during the 2012 taxation year.

[132] Mr. van Eijle testified that he found it reasonable to consider that 75% of his work time related to SR&ED. On the basis of 48 weeks of work a year at 40 hours a week, as he would work 10 to 12.5 hours per day and would also work at least every other Saturday, Mr. van Eijle estimated that he spent 1440 hours on SR&ED activities, which represents salary in the amount of $62,747. Further details can be found in Exhibit A-24 (p. 20). In April 2011, no SR&ED work was conducted. For the 184 working days in the period from May to December 2011, 790 hours were spent on SR&ED (for every period of 7 working days, 3 days were devoted to

SR&ED, which represents 79 days x 10 hours). For the 70 working days in the period from January to March 2012, 100% of Mr. van Eijle's time was devoted to SR&ED for a total of 700 hours (70 days x 10 hours). According to Mr. van Eijle estimates, a total of 1490 hours was spent on SR&ED activities (close to the 1440 estimated hours claimed by Indusol in respect of Mr. van Eijle's work).

[133] Furthermore, Mr. van Eijle estimated that it was reasonable to conclude that 50% of Ms. Clément's time was spent on SR&ED activities. On the basis of 48 weeks per year at 35 hours per week (7 hours per working day), Mr. van Eijle estimated that Ms. Clément spent 840 hours on SR&ED (that is half of her time), which represents salary in the amount of $41,831.

[134] A review of the evidence showed that Mr. van Eijle used an approximation to determine the hours Ms. Clément and he worked and purportedly devoted to SR&ED activities. No documents were adduced in evidence to verify or establish that Mr. van Eijle and Ms. Clément actually worked 1440 hours and 840 hours respectively performing SR&ED-related tasks: no time sheets, no logs, no agendas, no records and no minutes were submitted. Furthermore, there is no evidential basis for the estimate that 75% and 50% of Mr. van Eijle's and Ms. Clément's respective work was SR&ED-related. The Appellant did not provide any evidence whatsoever to connect the hours with the activities carried on by Ms. Clément and Mr. van Eijle. No evidence was adduced at the hearing as to the tasks performed by them, as to how these tasks related to the hours claimed and as to how it can be concluded that Ms. Clément and Mr. van Eijle were employees directly engaged in SR&ED.

[135] In February 2013, the CRA requested details regarding the breakdown of the efforts devoted by the employees to the activities engaged in by Indusol during that year, and acknowledged the absence of timesheets to that point. The evidence showed that no such details were submitted to the CRA. The Appellant could have used agendas, records, e-mail exchanges, notes and correspondence to reconstruct that information, as the CRA's request was made less than a year after the end of the 2012 taxation year.

[136] As indicated by Justice Tardif in *Laboratoire Du-Var Inc. v. The Queen*, 2012 TCC 366 (at paras. 43, 44 and 45), in cases like the case at bar, the Court has to consider the credibility of the witness, but credibility cannot be based solely on general explanations.

[137] Here, Mr. van Eijle simply estimated the number of hours he and Ms. Clément worked during the 2012 taxation year and claimed that 75% and 50% of their respective time was devoted to SR&ED activities. Since the Appellant's estimates are extremely general and were submitted without any evidentiary support, the salaries paid to Mr. van Eijle and Ms. Clément cannot be allowed as deductible eligible SR&ED expenditures and cannot be considered qualified expenditures for ITC purposes. I find that the lack of evidence as to the time spent on various tasks is fatal to Indusol's claim.

*The Computer*

[138] In order for the capital expenditure for the Computer to be deductible under paragraph 37(1)(b) and to be a qualified expenditure for ITC purposes, Indusol has to show either that the Computer was intended to be used during all or substantially all of its operating time in its expected useful life for the prosecution of SR&ED or that all or substantially all of its value would be consumed in the prosecution of SR&ED (subject to subclause 37(8)(a)(ii)(B)(III)).

[139] Indusol claimed an amount of $3,901 as a deductible capital expenditure for the cost of the Computer under paragraph 37(1)(b) and as a qualified expenditure for ITC purposes. According to Mr. van Eijle, the Computer was tested under the dirt, heat and vibration conditions found in a cargo ship setting. He testified that the Computer was worthless at the end of the 2012 taxation year.

[140] According to the Respondent, Indusol provided no evidence as to the Computer's use and as to whether it was used in an SR&ED context.

[141] I find that, on a balance of probabilities, the Computer was not intended to be used for the prosecution of SR&ED. The activity of testing the durability of a computer is not in itself an SR&ED activity. Mr. van Eijle's testimony is to the effect that he tested the Computer on ships to determine whether it was able to withstand the harsh conditions found there. Furthermore, the evidence is silent as to whether the Computer was used on the vessels to operate and test the DIS. Even if I had concluded that some SR&ED activities were carried on by Indusol, which I have not, the fact remains that Indusol failed to show, on a balance of probabilities, that the requirements of paragraph 37(1)(b) are met. Consequently, I find that the cost of the Computer is not a deductible capital expenditure made for the prosecution of SR&ED, nor is it a qualified expenditure for ITC purposes.

[142] At the hearing, the Appellant also argued that the cost of the Computer is an expenditure of a current nature deductible as "the cost of materials consumed . . . in the prosecution of [SR&ED]" (subclause 37(8)(a)(ii)(B)(V)). Having concluded that the Computer was not used for the prosecution of SR&ED, I find that the requirements of subclause 37(8)(a)(ii)(B)(V) are not met.

[143] For these reasons, I find that the amount of $3,901 paid by Indusol for the purchase of the Computer is not a deductible SR&ED expenditure under section 37, nor is it a qualified expenditure for ITC purposes.

*The Licence*

[144] The cost of the renewal of the Licence was claimed by Indusol as an expenditure of a current nature deductible as "the cost of materials consumed . . . in the prosecution of SR&ED" (subclause 37(8)(a)(ii)(B)(V)).

[145] The Licence was a subscription to the Microsoft Developer Network which allowed Indusol, for a limited time, to use program development software. According to Mr. van Eijle, it was used only for the purposes of the DIS Project and for no other purposes. Hence, according to him, as the Licence was used exclusively for SR&ED purposes, the cost paid for the renewal thereof should be deductible as a current expense as a cost of materials consumed in the prosecution of SR&ED.

[146] The Respondent, however, argued that there was no evidence adduced at the hearing as to the use of the Licence and as to whether it was used in an SR&ED context. Furthermore, the Respondent is of the view that the Licence cannot be considered as having been consumed in the prosecution of SR&ED because it was still in existence after the conclusion of the activities carried on by Indusol.

[147] The Act does not define the words "materials" or "consumed". The principles of interpretation as set out by the Supreme Court of Canada are that the words of an Act ". . . 'are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament' . . . The interpretation of a statutory provision must be made according to a textual, contextual and purposive analysis to find a meaning that is harmonious with the Act as a whole" (*Canada Trustco Mortgage Co. v. Canada*, 2005 SCC 54, at paragraph 10, [2005] 2 S.C.R. 601). The Supreme Court also indicates that when the words are precise and unequivocal, their ordinary meaning will play a dominant role, but if the words

can support more than one reasonable meaning, the ordinary meaning of the words will play a lesser role.

[148] As indicated above, SR&ED tax incentive provisions should be given a fair, large and liberal construction and interpretation. Therefore, the language used in the SR&ED provisions should be given a large and liberal interpretation, in addition to being interpreted in its grammatical and ordinary sense, provided the words are precise and unequivocal.

[149] In the *Oxford English Dictionary* online, one definition of the noun "material" is "[t]he matter or substance from which a thing is or may be made."

[150] In *Black's Law Dictionary* (11th ed.), material is defined as "1. A solid substance such as wood, plastic, metal, or paper. 2. The things that are used for making or doing something. 3. Information, ideas, data, documents, or other things that are used in reports, books, films, studies, etc."

[151] Given the ordinary meaning of the word material, which generally refers to elements from which something is made, I find that the Licence cannot be considered as a "material". The Licence was used by Indusol to help with software development and hence is not an element from which something is made. Given my conclusion in respect of the word material, I do not have to consider the meaning of the word "consumed". Therefore, the cost of the Licence cannot be claimed by Indusol under paragraph 37(1)(a) as a current expense as a cost of materials consumed in the prosecution of SR&ED.

[152] In his closing argument, Mr. van Eijle also submitted that the cost for the renewal of the Licence could also be considered as a capital expenditure deductible under paragraph 37(1)(b).

[153] According to paragraph 37(1)(b), expenditures of a capital nature incurred for the provision of premises, facilities or equipment where it was intended either that it would be used during all or substantially all of its operating time in its expected useful life for the prosecution of SR&ED or that all or substantially all of its value would be consumed in the prosecution of SR&ED, may be deducted under paragraph 37(1)(b) (subject to clause 37(8)(a)(ii)(B)).

[154] If I had concluded that the activities carried on by Indusol during the 2012 taxation year in respect of the DIS Project were SR&ED, which I have not, the cost of the Licence would qualify as an eligible capital expenditure since the Licence

had an expiry date and the evidence showed that all of its operating time in its useful life was devoted to the DIS Project. However, as I have concluded that the activities carried on by Indusol during the 2012 taxation year in respect of the DIS Project were not SR&ED, the cost of the Licence is not an eligible SR&ED expenditure under paragraph 37(1)(b) and is not a qualified expenditure for ITC purposes.

## VI- CONCLUSION

[155] For these reasons, the activities undertaken by Indusol during the 2012 taxation year in respect of the DIS Project do not constitute SR&ED. Furthermore, expenses claimed by Indusol totalling $111,883 (which consist of salary totalling $104,578 paid to Mr. van Eijle and Ms. Clément, the amount of $3,901 for the purchase of a portable computer and the amount of $3,404 for the renewal of a Microsoft Developer Network licence) are not deductible under section 37 as SR&ED expenditures and are not qualified expenditures for the purposes of the calculation of the ITC under subsection 127(5).

[156] The appeal is therefore dismissed, with costs to the Respondent.

Signed at Montreal, Quebec, this 14th day of September 2020.

"Dominique Lafleur"

Lafleur J.

# Schedule A

Income Tax Act, R.S.C. 1985, c. 1 (5th supp.)

Paragraphs 37(1)(a) and (b), subclause 37(8)(a)(ii)(A)(III) and clause 37(8)(a)(ii)(B)

**Scientific research and experimental development**

**37 (1)** Where a taxpayer carried on a business in Canada in a taxation year, there may be deducted in computing the taxpayer's income from the business for the year such amount as the taxpayer claims not exceeding the amount, if any, by which the total of

**(a)** the total of all amounts each of which is an expenditure of a current nature made by the taxpayer in the year or in a preceding taxation year ending after 1973

**(i)** on scientific research and experimental development carried on in Canada, directly undertaken by or on behalf of the taxpayer, and related to a business of the taxpayer,

[…]

**(b)** the lesser of

**(i)** the total of all amounts each of which is an expenditure of a capital nature made by the taxpayer (in respect of property acquired that would be depreciable property of the taxpayer if this section were not applicable in respect of the property, other than land or a leasehold interest in land) in the year or in a preceding taxation year ending after 1958 on scientific

Loi de l'impôt sur le revenu, L.R.C. 1985, ch. 1 (5e suppl.)

Alinéas 37(1)a) et b), subdivision 37(8)a)(ii)(A)(III) et division 37(8)a)(ii)(B)

**Activités de recherche scientifique et de développement expérimental**

**37 (1)** Le contribuable qui exploite une entreprise au Canada au cours d'une année d'imposition peut déduire dans le calcul du revenu qu'il tire de cette entreprise pour l'année un montant qui ne dépasse pas l'excédent éventuel du total des montants suivants :

**a)** le total des montants dont chacun représente une dépense de nature courante qu'il a faite au cours de l'année ou d'une année d'imposition antérieure se terminant après 1973 :

**(i)** soit pour des activités de recherche scientifique et de développement expérimental exercées au Canada directement par le contribuable ou pour son compte, en rapport avec une entreprise du contribuable,

…

**b)** le moins élevé des montants suivants :

**(i)** le total des montants dont chacun représente une dépense en capital que le contribuable a faite au cours de l'année ou d'une année d'imposition antérieure se terminant après 1958 quant à des biens acquis qui seraient, sans le présent article, des biens amortissables du contribuable – autres que des fonds de terre ou des droits de tenure à bail dans ces

research and experimental development carried on in Canada, directly undertaken by or on behalf of the taxpayer, and related to a business of the taxpayer, and

fonds –, pour des activités de recherche scientifique et de développement expérimental exercées au Canada directement par le contribuable ou pour son compte, en rapport avec une entreprise du contribuable,

**(ii)** the undepreciated capital cost to the taxpayer of the property so acquired as of the end of the taxation year (before making any deduction under this paragraph in computing the income of the taxpayer for the taxation year),

**(ii)** la fraction non amortie du coût en capital des biens ainsi acquis, pour le contribuable, à la fin de l'année (avant toute déduction, prévue par le présent alinéa, dans le calcul du revenu du contribuable pour l'année);

[…]

…

**Interpretation**

**(8)** In this section,

**(a)** references to expenditures on or in respect of scientific research and experimental development

**Interprétation**

**(8)** Dans le cadre du présent article :

**a)** les mentions des dépenses afférentes aux activités de recherche scientifique et de développement expérimental :

[…]

…

**(ii)** where the references occur other than in subsection 37(2), include only

**(A)** expenditures incurred by a taxpayer in a taxation year (other than a taxation year for which the taxpayer has elected under clause (B)), each of which is

**(ii)** lorsqu'elles figurent ailleurs qu'au paragraphe (2), se limitent :

**(A)** aux dépenses engagées par un contribuable au cours d'une année d'imposition, sauf une année d'imposition pour laquelle le contribuable a fait le choix prévu à la division (B), représentant chacune :

[…]

…

**(III)** an expenditure of a capital nature that at the time it was incurred was for the provision of premises, facilities or equipment, where at that time it was intended

**(III)** soit une dépense en capital pour la fourniture de locaux, d'installations ou de matériel qui, au moment où la dépense est engagée, répondent à l'une des conditions suivantes :

**1.** that it would be used during all or substantially all of its operating time in its expected

**1.** ils sont censés être utilisés, pendant la totalité, ou presque, de leur temps d'exploitation au

| | |
|---|---|
| useful life for, or | cours de leur vie utile prévue, dans le cadre d'activités de recherche scientifique et de développement expérimental exercées au Canada, |
| **2.** that all or substantially all of its value would be consumed in, | **2.** la totalité, ou presque, de leur valeur est censée être consommée dans le cadre d'activités de recherche scientifique et de développement expérimental exercées au Canada, |

the prosecution of scientific research and experimental development in Canada, and

| | |
|---|---|
| **(B)** where a taxpayer has elected in prescribed form and in accordance with subsection 37(10) for a taxation year, expenditures incurred by the taxpayer in the year each of which is | **(B)** si un contribuable en fait le choix sur formulaire prescrit et en conformité avec le paragraphe (10) pour une année d'imposition, aux dépenses engagées par lui au cours de l'année, représentant chacune : |
| **(I)** an expenditure of a current nature for, and all or substantially all of which was attributable to, the lease of premises, facilities or equipment for the prosecution of scientific research and experimental development in Canada, other than an expenditure in respect of general purpose office equipment or furniture, | **(I)** soit une dépense courante pour la location de locaux, d'installations ou de matériel servant à des activités de recherche scientifique et de développement expérimental exercées au Canada et qui y est attribuable en totalité, ou presque, à l'exception d'une dépense pour du mobilier ou de l'équipement de bureau de nature générale, |
| **(II)** an expenditure in respect of the prosecution of scientific research and experimental development in Canada directly undertaken on behalf of the taxpayer, | **(II)** soit une dépense pour des activités de recherche scientifique et de développement expérimental exercées au Canada et entreprises directement pour le compte du contribuable, |
| **(III)** an expenditure described in subclause (A)(III), other than an expenditure in respect of general purpose office equipment or | **(III)** soit une dépense visée à la subdivision (A)(III), à l'exception d'une dépense pour du mobilier ou de l'équipement de bureau de |

furniture,

**(IV)** that portion of an expenditure made in respect of an expense incurred in the year for salary or wages of an employee who is directly engaged in scientific research and experimental development in Canada that can reasonably be considered to relate to such work having regard to the time spent by the employee thereon, and, for this purpose, where that portion is all or substantially all of the expenditure, that portion shall be deemed to be the amount of the expenditure,

**(V)** the cost of materials consumed in the prosecution of scientific research and experimental development in Canada, or

**(VI)** ½ of any other expenditure of a current nature in respect of the lease of premises, facilities or equipment used primarily for the prosecution of scientific research and experimental development in Canada, other than an expenditure in respect of general purpose office equipment or furniture;

nature générale,

**(IV)** soit la partie d'une dépense faite relativement à des frais engagés au cours de l'année pour le traitement ou le salaire d'un employé exerçant directement des activités de recherche scientifique et de développement expérimental au Canada, qu'il est raisonnable de considérer comme se rapportant à ce travail compte tenu du temps que l'employé y consacre; à cette fin, la partie de dépense est réputée correspondre au montant de la dépense si elle en constitue la totalité, ou presque,

**(V)** soit le coût du matériel consommé dans le cadre d'activités de recherche scientifique et de développement expérimental exercées au Canada,

**(VI)** soit la moitié de toute autre dépense courante pour la location de locaux, d'installations ou de matériel utilisés principalement dans le cadre d'activités de recherche scientifique et de développement expérimental exercées au Canada, à l'exception d'une dépense pour du mobilier ou de l'équipement de bureau de nature générale,

Subsection 127(5)

**Investment tax credit**

**(5)** There may be deducted from the tax otherwise payable by a taxpayer under this Part for a taxation year an amount not exceeding the lesser of

**(a)** the total of

**(i)** the taxpayer's investment tax

Paragraphe 127(5)

**Crédit d'impôt à l'investissement**

**(5)** Est déductible de l'impôt payable par ailleurs par un contribuable en vertu de la présente partie pour une année d'imposition un montant qui ne dépasse pas le moins élevé des montants suivants :

**a)** le total des sommes suivantes :

**(i)** tout crédit d'impôt à

| | |
|---|---|
| credit at the end of the year […] or of the taxpayer's SR&ED qualified expenditure pool at the end of the year or at the end of a preceding taxation year, and | l'investissement du contribuable à la fin de l'année […] ou de son compte de dépenses admissibles de recherche et de développement à la fin de l'année ou d'une année d'imposition antérieure, |
| […] | … |
| Subsection 127(9) | Paragraphe 127(9) |
| […] | … |
| ***SR&ED qualified expenditure pool*** of a taxpayer at the end of a taxation year means the amount determined by the formula<br>A + B - C<br>where | ***compte de dépenses admissibles de recherche et de développement*** Quant à un contribuable à la fin d'une année d'imposition, le résultat du calcul suivant :<br>A + B – C<br>où : |
| **A** is the total of all amounts each of which is a qualified expenditure incurred by the taxpayer in the year, | **A** représente le total des montants représentant chacun une dépense admissible que le contribuable a engagée au cours de l'année; |
| **B** is the total of all amounts each of which is an amount determined under paragraph 127(13)(e) for the year in respect of the taxpayer, and in respect of which the taxpayer files with the Minister a prescribed form containing prescribed information by the day that is 12 months after the taxpayer's filing-due date for the year, and | **B** le total des montants représentant chacun un montant déterminé selon l'alinéa (13)e) pour l'année quant au contribuable, relativement auquel il présente au ministre un formulaire prescrit contenant les renseignements prescrits au plus tard douze mois après la date d'échéance de production qui lui est applicable pour l'année; |
| **C** is the total of all amounts each of which is an amount determined under paragraph 127(13)(d) for the year in respect of the taxpayer | **C** le total des montants représentant chacun un montant déterminé selon l'alinéa (13)d) pour l'année quant au contribuable. |
| […] | … |
| ***qualified expenditure*** incurred by a taxpayer in a taxation year means | ***dépense admissible*** Dépense engagée par un contribuable au cours d'une année d'imposition qui représente : |
| **(a)** an amount that is an expenditure incurred in the year by the taxpayer in | **a)** soit une dépense relative à des activités de recherche scientifique et |

respect of scientific research and experimental development that is an expenditure

**(i)** for first term shared-use-equipment or second term shared-use-equipment,

**(ii)** described in paragraph 37(1)(a), or

**(iii)** described in subparagraph 37(1)(b)(i), or

**(b)** a prescribed proxy amount of the taxpayer for the year (which, for the purpose of paragraph (e), is deemed to be an amount incurred in the year),

[…]

Income Tax Regulations, C.R.C. c. 945

Subsection 2900(4)

[…]

**2900(4)** For the purposes of the definition ***qualified expenditure*** in subsection 127(9) of the Act, the prescribed proxy amount of a taxpayer for a taxation year, in respect of a business, in respect of which the taxpayer elects under clause 37(8)(a)(ii)(B) of the Act is 65% of the total of all amounts each of which is that portion of the amount incurred in the year by the taxpayer in respect of salary or wages of an employee of the taxpayer who is directly engaged in scientific research and experimental development carried on in Canada that can reasonably be considered to relate to the scientific research and experimental development having regard to the time spent by the employee on the scientific research

de développement expérimental qui, selon le cas :

**(i)** est affectée à du matériel à vocations multiples de première période ou à du matériel à vocations multiples de deuxième période,

**(ii)** est visée à l'alinéa 37(1)a),

**(iii)** est visée au sous-alinéa 37(1)b)(i),

**b)** soit un montant de remplacement visé par règlement applicable au contribuable pour l'année (qui, pour l'application de l'alinéa e), est réputé être un montant engagé au cours de l'année).

…

Règlement de l'impôt sur le revenu, C.R.C., ch. 945

Paragraphe 2900(4)

…

**2900(4)** Pour l'application de la définition de ***dépense admissible***, au paragraphe 127(9) de la Loi, le montant de remplacement applicable à un contribuable quant à une entreprise pour une année d'imposition à l'égard de laquelle il fait le choix prévu à la division 37(8)a)(ii)(B) de la Loi est égal à 65 % du total des montants représentant chacun la partie du montant qu'il a engagé au cours de l'année, au titre du traitement ou du salaire de son employé qui participe directement à des activités de recherche scientifique et de développement expérimental exercées au Canada, qu'il est raisonnable de considérer comme se rapportant à ces activités compte tenu du temps que

and experimental development. l’employé y consacre.

| | |
|---|---|
| CITATION: | 2020 TCC 103 |
| COURT FILE NO.: | 2016-5458(IT)G |
| STYLE OF CAUSE: | INDUSOL INDUSTRIAL CONTROL LTD. v. HER MAJESTY THE QUEEN |
| PLACE OF HEARING: | Trois-Rivières, Quebec |
| DATE OF HEARING: | February 10, 11 and 12, 2020 |
| REASONS FOR JUDGMENT BY: | The Honourable Justice Dominique Lafleur |
| DATE OF JUDGMENT: | September 14, 2020 |

APPEARANCES:

| | |
|---|---|
| Agent for the Appellant: | Robbert Jan van Eijle |
| Counsel for the Respondent: | Christina Ham |

COUNSEL OF RECORD:

For the Appellant:

Name:

Firm:

For the Respondent: Nathalie G. Drouin
Deputy Attorney General of Canada
Ottawa, Canada