

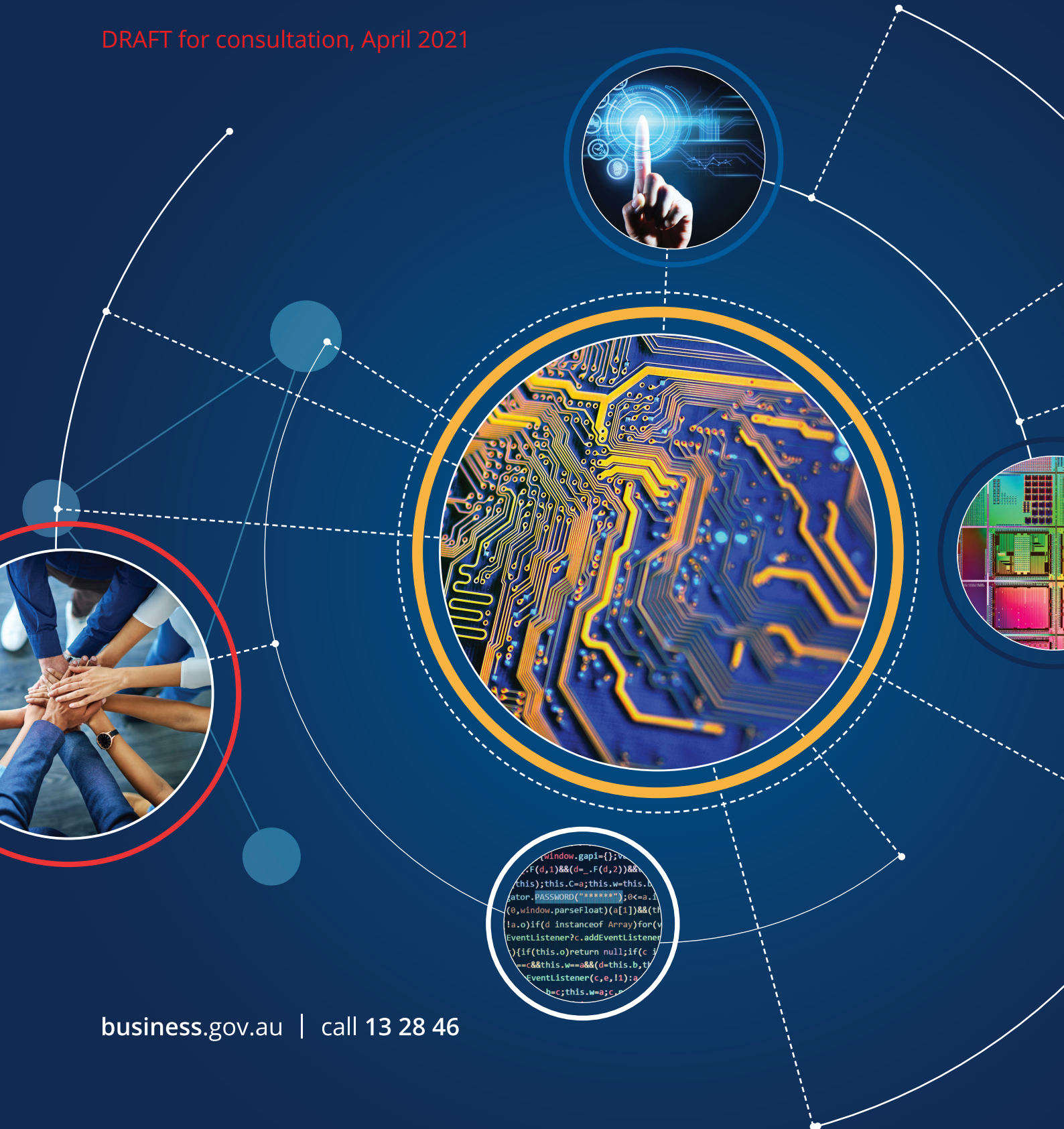


Australian Government
Department of Industry, Science,
Energy and Resources

AusIndustry
R&D Tax Incentive

Software development activities and the R&D Tax Incentive

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Overview

What is the R&DTI?

The Research and Development Tax Incentive (R&D Tax Incentive or R&DTI) encourages research and development (R&D) activities that generate knowledge for the benefit of the Australian economy.

The Department of Industry, Science, Energy and Resources (the department), on behalf of Industry Innovation and Science Australia (IISA), administers the R&D Tax Incentive with the Australian Taxation Office (ATO).

About our guides

The [Guide to Interpretation](#) is our primary guide to explain the key terms of the R&D Tax Incentive. We encourage you to read the Guide to Interpretation to help you assess whether your R&D is eligible for the R&D Tax Incentive. The content in the Guide to Interpretation reflects the way we apply sections 355-25 and 355-30 of the Income Tax Assessment Act 1997 (ITAA 1997). This is informed where applicable by judgments from the Administrative Appeals Tribunal (AAT) and Federal Court of Australia (FCA).

Other guidance is available on our website at business.gov.au/rdti. This includes industry and sector specific guides and case studies. Our guides will help you assess R&D activities you conduct or plan to conduct and register. However they provide general advice only. You need to refer to the legislation when you assess whether your activities are eligible.

About this guide

You should read this guide if you conduct or plan to conduct R&D activities that involve software development and you need help to assess your activities against the legislative requirements of the R&D Tax Incentive.

The main focus of your business may be software development, or you may conduct software development activities to enable other business or R&D activities, such as manufacturing or mining. If you conduct or plan to conduct software development activities within a R&D project, this content may interest you.

The information in this guide may assist you to assess whether your software development activities meet the requirements for core or supporting R&D activities as defined in the legislation. Throughout this guide we use the term “eligible” to mean entities, activities or expenditure that meet the legislative requirements of the R&DTI.

We know from experience that the more information and support you have, the more likely you are to register eligible R&D activities. We are here to support you. If you are unsure about the eligibility of your software development activities after you read this guide, please contact us on 13 28 46 or attend one of our events or information sessions: business.gov.au/rdti-events.

Software development and R&D activities

Software development activities can be fast-paced and diverse. Such activities are capable of meeting the requirements for core R&D activities. They must meet all of the legislative requirements to be eligible for the R&DTI.

In the course of your business, you may conduct software development activities. You may plan a project to develop a new or improved software application. You may develop software that will form part of a product or device, or to enable service delivery. You might develop software to control a process. As part of your software development project, you may conduct eligible R&D Activities that you can register for the R&DTI.

Eligible R&D activities

The R&DTI is for eligible R&D activities that you conduct and register. Activities are the building blocks that make up a project. When you register for the R&DTI, we expect you to describe specific R&D activities you conduct within your project.

You must conduct or plan to conduct at least one core R&D activity to register for the R&DTI. Section 355-25(1) of the ITAA 1997, the legislation that applies to the program, states:

Core R&D activities are experimental activities:

- (a) whose outcome cannot be known or determined in advance on the basis of current knowledge, information or experience, but can only be determined by applying a systematic progression of work that: i. is based on principles of established science; and ii. proceeds from hypothesis to experiment, observation and evaluation, and leads to logical conclusions; and
- (b) that are conducted for the purpose of generating new knowledge (including new knowledge in the form of new or improved materials, products, devices, processes or services)

Your activities must meet (a) and (b) to be eligible core R&D activities. They also must not be excluded activities. Section 355-25(2) of the ITAA 1997 lists excluded activities.

After you assess that you conduct or plan to conduct at least one core R&D activity, you can assess whether you conduct any activities that meet the definition of supporting R&D activities. Supporting R&D activities must directly relate to a core R&D activity. In some circumstances you must also conduct them for the dominant (most prevailing or most influential) purpose of supporting a core R&D activity. Detailed information about the eligibility requirements for core and supporting R&D activities is provided in the [Guide to Interpretation](#).

This guide provides an overview of the requirements for R&D activities, and examples to help you self-assess your software development activities. Examples we provide are for guidance only. Even if your activities appear like the examples, they might not be eligible for the R&D Tax Incentive. Your activities must meet all of the legal requirements to be eligible R&D activities. You need to assess your activities based on your specific and individual circumstances. You must always assess your activities against the legislation.

Core R&D activities

Outcome cannot be known or determined in advance

For an activity to be a core R&D activity, a competent professional cannot know or determine the outcome of the activity based on current knowledge anywhere in the world. The outcome needs to be one that you can determine only by applying a systematic progression of work, based on principles of established science.

We expect you to search worldwide for an existing way to achieve your outcome before you start your R&D activity. We expect your records to show you did this. For example, you could undertake a search of Computer Science Journals, major open source code repositories (such as GitHub) and/or tech blogs, consult with your professional network and ask questions on a technology forum.

A competent professional will be a person who has knowledge, skills and experience in a field that relates to your R&D. This might be you or someone else in your organisation or industry sector, a consultant or an academic expert.

Systematic progression of work

Your systematic progression of work needs to be based on principles of established science. It must proceed from hypothesis to experiment(s), observation, evaluation and lead to logical conclusions.

For some R&D activities, the systematic progression of work may progress over multiple years. This is less likely in software development projects, which you may conduct over a shorter period of time.

We expect you to keep records to show you conduct all elements of your systematic progression of work. We expect evidence to show when and how your activities proceed from one element to the next and how they meet the definition of core R&D activities.

We expect you to record:

- the hypothesis you are testing,
- what the experiment, or set of related experiments, was and how it was conducted,
- what the results of the experiment were, and
- what conclusions were drawn from the results.

While the R&DTI is a self-assessment program, we may review your application. If we do, we will review your systematic progression of work as a whole.

We expect that records you make before or around the time you conduct your activities will show that your activities took place in the year of claim.

The department and the Australian Taxation Office (ATO) provide further guidance on record keeping requirements:

- [R&D Tax Incentive: Record-Keeping and R&D Planning](#)
- [Research and development tax incentive: keeping records and calculating your notional deductions](#)

What is a hypothesis?

Your hypothesis is your idea or proposed explanation for how you might achieve a particular result and why that result may or may not be achievable.

We expect you to show how you formed your hypothesis based on your research into the current knowledge. For example, you might find information from multiple sources stating that a particular compression algorithm can compress a 12-megapixel image, but will exceed the power limits of existing processors. You might find other information that relates to methods to increase the efficiency of compression algorithms so that they will work within existing power limitations. This might give you an idea about how to improve an existing compression algorithm so that it can achieve a particular result.

For example, to compress a 12-megapixel image without exceeding the limits of the low-power processor. Alternatively, you might have an idea about how to create a new algorithm.

Your hypothesis will direct the design and conduct of your experiment.

What is an experiment?

An experiment is a scientific procedure that you undertake to test your hypothesis, observe what happens and compare this to what you expect. You may also compare your results to those from previous experiments.

We expect you to explain how you conduct or plan to conduct your experiment. For example, you might describe the parameters you vary, those you hold constant, and those you observe or measure.

Where experiments do not yield the required results, the inputs to the experiments (such as software code or design parameters) may be varied and further experiments repeated and completed until such time that the outcome is known or able to be determined.

A failed or abandoned experiment may still be eligible if the necessary legislative criteria are met.

Observation and evaluation

Observation is where you observe, measure and record information and results that relate to your experiment. Such information can be qualitative (descriptive) or quantitative (numerical data).

Evaluation is where you assess and analyse the results of your experiments. You need to consider what the results of your experiment mean.

We expect your records to show that you evaluate the results of your experiment to understand why and how you achieve or do not achieve your desired outcome.

Leads to logical conclusions

You need to form logical conclusions about why your results support your hypothesis or not. Your logical conclusion may be that you need to investigate different solutions and test a new hypothesis.

Purpose to generate new knowledge

S355-25(1)(b): Core R&D activities are experimental activities ...that are conducted for the purpose of generating new knowledge (including new knowledge in the form of new or improved materials, products, devices, processes or services).

You may decide to conduct R&D for several reasons. To be an eligible core R&D activity for the program, one of your substantial purposes to conduct R&D needs to be to generate new knowledge that does not exist.

In most cases, your core R&D activities will meet the new knowledge aspect of paragraph (b) above, if they meet the [unknown outcome](#) aspect in paragraph (a).

New knowledge can be general or applied. It may be new theoretical or practical understanding of a subject. It also may be in the form of a new or improved material, product, device, process or service.

Software development activity exclusion

Some software development activities are excluded from being core R&D activities.

The legislation, at section 355-25(2) of the ITAA 1997, lists those activities that cannot be core R&D activities for the R&DTI:

(h) developing, modifying or customising computer software for the dominant purpose of use by any of the following entities for their internal administration (including the internal administration of their business functions): (i) the entity (the developer) for which the software is developed, modified or customised; (ii) an entity *connected with the developer; (iii) an *affiliate of the developer, or an entity of which the developer is an affiliate

Before registering any activities, you should check whether your activities are excluded from being core R&D activities. A list and detailed explanation of excluded activities is contained in the [Guide to Interpretation](#).

If you conduct activities to develop, modify or customise computer software, you need first to assess your dominant purpose to conduct the activities.

If your dominant purpose for the activities is not internal business administration for your entity or an affiliate entity, it is not excluded from being a core R&D activity. You then only need to assess whether it meets the requirements for a core or supporting R&D activity.

If your dominant purpose is to use the software to administer your entity's or an affiliate entity's business, then activities you conduct to develop, modify or customise that software cannot be core or supporting R&D activities.

To determine your dominant purpose to develop, modify or customise computer software, you need to consider all the purposes you have to conduct that activity. You then need to consider the strength of each purpose and how important each is compared to your other purposes.

Usually, activities that are excluded from being core R&D activities may still qualify as supporting R&D activities. This is not the case for software development, modification or customisation activities that are covered by this exclusion.

If your activity is excluded from being a core R&D activity because the dominant purpose for that activity is to use the software in the internal administration of your business or your affiliate's business, then the dominant purpose cannot also be to support a core R&D activity.

Supporting R&D activities

When you conduct software development activities that meet the requirements for core R&D activities, you may also conduct supporting R&D activities. Such activities might include: setting up test beds, coding algorithms that will be used in an experiment, or collating a data sample that will be used to conduct a relevant experiment.

Supporting activities excluded from being core R&D activities, and production activities

Supporting R&D activities must directly relate to a core R&D activity to be eligible for the R&DTI. You must conduct some supporting R&D activities for the dominant purpose of supporting your core R&D activities. These include activities that:

- are excluded from being core R&D activities
- produce goods or services
- are directly related to producing goods or services.

In any of these circumstances, you need to assess whether you conduct each of these activities for the dominant purpose of supporting a core R&D activity.

Dominant purpose means your prevailing or most influential purpose. Your main purpose of conducting your activities must be to support a core R&D activity.

Remember that activities referred to in section 355-25(2)(h) of the ITAA 1997 cannot be core or supporting R&D activities.

Please refer to the Guide to Interpretation for more information about dominant purpose.

Software development methodologies

We expect that you will conduct your activities using known methodologies, however you will need to show that you conduct your activities as part of a systematic progression of work within a core R&D activity, or that your activities are supporting R&D activities in relation to a core R&D activity. You may conduct some of the following activities when you conduct experiments to test your hypothesis. We expect your records to show how you conduct these activities within a systematic progression of work:

- system testing
- requirements testing
- data mapping and data migration testing
- testing the efficiency of different algorithms that are already known to work
- testing websites in operation by measuring the number of hits
- digital transformation activities – transforming predominantly manual processes to digital
- upgrading technology
- routine computer and software maintenance
- data manipulation.

If you do not conduct these activities within a systematic progression of work as part of a core R&D activity, they may be supporting R&D activities. They would need to directly relate to a core R&D activity.

We recognise that some routine testing activities, such as debugging (identifying and fixing errors in codes) and beta testing, can be part of a core R&D activity where they constitute part of a systematic progression of work as defined in the legislation. Your core R&D activities must meet all requirements of section 355-25 of the ITAA 1997 to be eligible.



Case Study: Far Side – R&D in a new space

This is a hypothetical case study designed to explain eligibility requirements for the R&D Tax Incentive.

Sometimes applicants and their advisers quote our case studies saying that their circumstances are the same. Although your circumstances may appear similar to this case study, your activities may not be eligible. You need to assess your activities based on your specific circumstances. You must assess your activities against the legal requirements.

Summary

Outcome

Far Side Analytics (Far Side) seeks to add new functionality to their proprietary software application, to enable dynamic 3D visualisation of a new planet. To achieve this, they need to create new mathematical and/or statistical frameworks to extrapolate a three-dimensional (3D) exemplar onto a neighbouring patch of a 3D object where only a limited number of 3D image patches are available.

Current Knowledge

Far Side consults with experts and searches worldwide. They cannot find current knowledge, information or experience to tell them how to achieve their outcome. Current knowledge in relation to solid texture synthesis does not extend to dynamic generation using 3D geological

exemplars. They conclude that they must conduct a systematic progression of work to determine whether they can create a model to enable dynamic 3D visualisation of the new planet.

Hypothesis

For their core R&D activity, Far Side's systematic progression of work proceeds from a hypothesis informed by background searches. They review literature and other available information in the field of solid texture synthesis, an imaging method that takes a sample 2D image exemplar (or patch) and extrapolates it to a 3D image composite. Their searches lead them to develop ideas for new models to extrapolate a 3D exemplar to a 3D composite, and for dynamic generation based on near real-time input data (a dynamic 3D to 3D solid texture synthesis technique).

Experiments

Far Side plans and conducts a set of experiments to test their hypotheses. Specifically, they plan to develop their new model using mathematical and/or statistical techniques and investigate how it performs:

- to extrapolate exemplars from real image patches, and
- in terms of dynamic extrapolation when given time-discretised data.

For each set of experiments, they are able to describe the parameters they vary, those they hold constant, and those they observe or measure.

New knowledge

Their purpose is to generate new knowledge in the form of a new software application. When they start their R&D activities there is no known technique to extrapolate a 3D exemplar onto a neighbouring patch of a 3D object. They will also generate new knowledge about how to achieve this through their R&D activities.

Eligible core R&D activities

Core Activity 1 – Development of a mathematical framework for dynamic 3D to 3D solid texture synthesis

Eligible supporting R&D activity

Supporting Activity 1.1 – Project management and dynamic data integration

Self-assessment

• *Q1 Is Far Side an eligible R&D entity?*

Far Side is a body corporate incorporated under Australian law. It is not an exempt entity. They meet the requirements of section 355-35 of the ITAA 1997.

• *Q2 Is their R&D eligible?*

Far Side assesses that they have one core R&D activity that meets the requirements of section 355-25 of the ITAA 1997. They also assess that they have one supporting R&D activity that meets the requirements of section 355-30 of the ITAA 1997.

• *Q3 Is their R&D expenditure eligible?*

Far Side reviews ATO guidance on eligible expenditure. They register their eligible R&D activities with AusIndustry and then lodge a claim with the ATO for eligible expenditure.

• *Q4 Do they have evidence to support their claim?*

Far Side keeps evidence of all activities that they register for the R&DTI. They also keep records of associated eligible expenditure.

Far Side – R&D in a new space

About Far Side

Far Side produces 3D visualisations of planets, stars and other astronomical features for both educational and scientific purposes.

When a new planet is discovered, Far Side wants to create a 3D visual model of this new planet for further study. They also want to integrate this as a new feature in their proprietary desktop software application. They have the qualifications, knowledge and experience they need to develop and produce visualisation software. They also keep up to date with new developments in relevant fields, such as solid texture synthesis, and consult with experts worldwide. They are competent professionals.

There are only a limited number of 3D image patches available of the new planet that they intend to visualise. These patches represent the local geological environment of the planet. Viewers can zoom in or out for further details. When Far Side attempts to render these 3D patches, it results in visual blind spots and incomplete sections of the overall 3D model. In addition, the render represents only a snapshot in time of the planet's environment. To ensure a complete and dynamic 3D render, Far Side searches worldwide for a solution to enable them to:

- extrapolate the 3D image patches to approximate what neighbouring patches might look like
- make the render process dynamic from different time-points (time-discretised input).

Far Side conducts searches of publicly available information, particularly in the field of solid texture synthesis. Solid texture synthesis is an imaging method that takes a sample 2D image exemplar (or an image patch) and extrapolates it to a 3D image composite. For example, a spherical object to represent a planet. The technique uses mathematical and/or statistical frameworks for 2D to 3D solid texture synthesis. The technique is dependent on complex and inter-related mathematical and/or statistical frameworks to analyse the image exemplar, extrapolate to neighbouring patches, and adjust the final 3D composite.

In their searches, which include conversations with other experts, Far Side does not find any available frameworks or models that use texture synthesis to extrapolate a 3D exemplar to a 3D composite. There is also no current knowledge available about how to generate dynamic 3D models with near real-time input data.

Far Side establishes that current mathematical models for solid texture synthesis do not accommodate a 3D exemplar. Furthermore, after they trial different options and methodologies that are known in the field of solid texture synthesis, they realise that the only solution is to develop new models.

Far Side determines that they need to develop a new dynamic 3D to 3D solid texture synthesis technique. They proceed to develop mathematical frameworks to enable dynamic 3D visualisation of the new planet.

They plan a set of experiments to test hypotheses that relate to how they might achieve dynamic 3D to 3D solid texture synthesis. For example, one hypothesis they intend to test relates to the use of multi-dimensional slice analysis to achieve a 3D composite, which retains the geographical features of a 3D exemplar patch.

Far Side establishes that they can only determine the outcome of their activities by conducting experiments to test their hypotheses.

R&DTI self-assessment

Far Side thinks that they may be eligible for the R&DTI.

First, they assess that they are an eligible R&D entity.

Next, they check the requirements for eligible R&D activities and review their project plan to assess whether the activities they plan to conduct are eligible.

They consider that one of their activities meets the requirements to be a core R&D activity. They assess that this activity meets the requirements of section 355-25 of the ITAA 1997 because:

- they can only determine the outcome through a systematic progression of work that is based on principles of established science and proceeds from their hypothesis
- there is no current knowledge that can tell them how to achieve their desired outcome
- they plan to conduct experiments to test their hypotheses about how to develop new dynamic 3D to 3D solid texture synthesis techniques

- they plan to evaluate results from their experiments to reach conclusions about their hypotheses
- they will document their activities and the conclusions they reach
- their purpose is to generate new knowledge in the form of new processes and an improved software product
- they will also generate new knowledge in the field of solid texture synthesis
- their activities are not excluded core R&D activities.

They assess that they may also be able to register a supporting R&D activity and that this activity can occur before, during or after their core R&D activity.

When they start their activities, they implement a system to keep records to show that their activities meet the requirements of the R&DTI. They also keep records of their eligible R&D expenditure that show the link to their eligible R&D activities.

Eligible R&D activities

For their core R&D activity, Far Side designs a set of experiments in which they build and test a series of new models employing experimental 3D to 3D solid texture synthesis techniques. They design their experiments to investigate the effects of different technical variables in each iteration of the model.

For example, in relation to the effect of new mathematical models on the relationship of real image patches to extrapolated exemplars, they develop iterations of pseudocode and algorithms with a generative adversarial network model at each iteration.

They observe that there is an increase in processing efficiency without loss of stability. They achieve a final iteration that can detect texture in an unsupervised setting from a collection of raw high resolution exemplars.

They use images of known geological features of a nearby object (the Moon) to validate their results and evaluate the accuracy of extrapolation. Their model incorporates an adversarial loss function, which penalises for incorrect reproduction of a given texture within a multi-dimensional slice. In relation to the quality of the output, particularly around the edges of the 3D exemplars, they are able to reach logical conclusions about any resulting mismatches between real and extrapolated images.

Far Side uses known techniques to evaluate the results of their experiments, to assess the performance of their new mathematical models. For example, in terms of dynamic extrapolation, they perform:

- asymptotic analysis to determine computational limitations
- analysis using known metrics for “*extract, transform, load*” (ETL) methods to benchmark the performance of their new mathematical and/or statistical frameworks against simulated network activity.

They apply these known asymptotic analysis and ETL methodologies to evaluate how the new frameworks handle time-discretised input. In other words, they employ known techniques to conduct their experiments. As such, they assess that this testing forms part of a systematic progression of work that proceeds from their hypothesis. Far Side notes that performance testing on its own would likely not meet the requirements of the R&DTI.

Through experiments, Far Side develops a new mathematical and statistical framework for 3D to 3D solid texture synthesis. They keep records which clearly **show the conduct of the experiments**.

Far Side conducts other activities before and during the conduct of Core Activity 1. These include:

- literature and patent searches and discussions with experts to assist them to develop their hypotheses
- development of evaluation software (test environment)
- activities to manage and record results of experiments they conduct via build sprints.

After they develop the mathematical and statistical frameworks for their new dynamic 3D to 3D solid texture synthesis method, they need to optimise queuing processes and messaging layers to obtain 3D planetary image samples from the external data source.

Far Side is able to show that these activities have a direct relationship to the core R&D activity. As such, they assess that these activities meet the definition of supporting R&D activities in section 355-30 of the ITAA 1997.

Supporting R&D activities must have a direct relationship to a core R&D activity. In this case, the core R&D activity relates to the development of new models for 3D to 3D solid texture synthesis. Far Side conducts further activities to integrate these new models into their current software application and improve user interaction and experience (UI/UX). They assess that these activities

do not have a direct relationship to the activities they conduct to develop the new models. They assess that they are not supporting R&D activities.

Registration

At financial year-end, Far Side assesses that they have one core and one supporting R&D activity for the R&DTI. They register them with AusIndustry and claim associated expenditure in their tax return.

Eligible core R&D activity

Core Activity 1 – Development of a mathematical framework for dynamic 3D to 3D solid texture synthesis

Eligible supporting R&D activity

Supporting Activity 1.1 – Project management and dynamic data integration

Evidence

Far Side keeps records of their eligible activities at the time they conduct them. They also keep records of eligible R&D costs.

The records they keep when they conduct their core R&D activities show that they could not determine the outcomes of their activities based on current knowledge, information or experience. They also show that the core R&D activity is based on principles of established science and contains all elements of a systematic progression of work. That is, it proceeds from hypothesis to experiment, observation and evaluation, and leads to logical conclusions.

The records they keep include:

- records of their searches of current information, which includes code repositories, journals and records of discussions with other experts
- R&D plan to outline the objectives of the project
- technical scoping documents
- internal reports that document how they develop and test their mathematical and statistical frameworks
- reports that show the results of experiments, analysis and conclusions
- records of code changes
- evidence of work that technical staff do and time spent on R&D activities
- expenditure they incur to produce and test their models
- evidence of other expenditure they incur on the core and supporting R&D activities showing the link to the activities.

Claiming the R&DTI

You should only register your software development activities if you feel confident that the activities you conduct are eligible, and you can provide evidence to support your self-assessment. This remains your responsibility regardless of whether:

- you choose to get external assistance from a consultant or advisor, or
- you complete the application yourself.

If your registration is later found to be non-compliant, your company is held responsible, and may need to return the program benefit and pay any compliance penalties.

Record-keeping is a vital part of claiming the R&D Tax Incentive. The best way to assess whether you can claim is to look at the records you have, and see whether they demonstrate that you meet the legislative criteria in sections 355-25 or 355-30 of the ITAA 1997.

How do I make a claim?

You need to apply to register with AusIndustry before you can claim for expenditure on your eligible R&D activities through the ATO. You need to apply to register within 10 months of the end of the income year in which you conduct your eligible R&D activities. For example, a company that conducted eligible activities in the financial year ending 30 June 2020 has until 30 April 2021 to register those activities. We will issue you with a registration number. You will need to enter this number in the R&D schedule in your annual income tax return.

What kind of expenditure can I claim?

The ATO is responsible for the rules about what expenditure is allowed by the program. The information below will give you a general idea of what expenditure is allowed.

You can claim expenditure that was incurred to conduct eligible core or supporting R&D activities, for example:

- wages, salaries, contractor fees
- rent, electricity, internet, hosting costs
- equipment, raw materials, testing kits.

You may also notionally deduct the decline in value of a tangible depreciating asset used for R&D activities.

For each item, you can only claim the proportion of expenditure and depreciation that you incurred to conduct the eligible R&D activities. You must be able to show how you worked this out if you are asked.

If you would like to know more you should see the information on 'Amounts you can claim' on the ATO's website.

You cannot claim expenditure under the R&D Tax Incentive for:

- 'core technology': the cost of technology that you have purchased or licensed for the purpose of developing it further. However, the costs associated with further developing the core technology or other technology that is required to conduct experiments may still be eligible if the relevant criteria are met

Core technology example

You purchase a licence to use smart phone simulator software and you want to use it to experiment with an app in a smart phone environment. The expenditure on the licence could be eligible as you do not plan to further develop or adapt the technology. You will merely use the technology to assist with your experiments.

You purchase a licence to use smart phone simulator software and you will further develop the source code to create a better smart phone simulator package. This would be core technology and the expenditure on the licence would not be eligible under the R&D Tax Incentive. This is because you will conduct activities to further develop the base simulator software code to suit your requirements.

- expenditure that your company does not ultimately bear the risk of expending (e.g. expenditure on activities done under contract where payment occurs regardless of the results). You can only claim for as much material as is used by the R&D activities.

Necessary expenditure example:

Your company develops and manufactures specialist coatings. You have a current production line that coats goggle lenses. You conduct a production activity to test your process to coat goggle lenses with a new type of dirt and oil resistant coating. In your core R&D activity, you will divert 50 goggle lenses to a different line, in which you will spray them with the new coating. The remaining 250 goggle lenses will go through your normal production line.

The trial of the new coating on 50 lenses could be a core R&D activity if it meets the legislative requirements in section 355-25 of the ITAA 1997.

You modify the software in your production control system to allow you to divert the 50 lenses to the new coating line. This could be a supporting R&D activity. Necessary expenditure may include the cost of modifying the control system, but not activities you may have conducted in the past to develop the control system for your normal production activities.

If an activity or project is terminated early, can I still claim?

Yes – you can claim for any R&D activities that meet the requirements of the legislation. Completion of an activity or project is not a factor. It is not necessary for your experiments to be successful – if an experiment returns a ‘negative’ result, this may still be an outcome that could not be known or determined in advance and you can still have the purpose of generating new knowledge.

If you terminate an activity or your project after completing a supporting R&D activity, but not the core R&D activity it supports, you must be able to clearly demonstrate with records that you had an intention to conduct the relevant core R&D activity. If this intention is not evident then the supporting R&D activity may not be eligible.

Can I claim for R&D activities that are done overseas?

The R&DTI supports eligible R&D activities you conduct in Australia. It may also support eligible R&D you conduct overseas. You must apply for and receive an Overseas Finding before you can claim for expenditure on overseas R&D activities.

To claim the R&D Tax Incentive for overseas activities, you must apply for and receive a positive [‘Overseas Finding’](#) from the Department of Industry, Science, Energy and Resources. This application must be made prior to the end of the income year in which you conduct the activities.

If you do not have a positive Overseas Finding, you must be able to demonstrate that the work was carried out in Australia, and not subcontracted out or otherwise performed overseas, and it otherwise meets the criteria to be an eligible R&D activity.

Evidence

What records do I need to keep?

We expect you to keep records so that you can provide them to us if we review your application for the R&DTI. Your systems and processes that identify, evaluate and record your eligible R&D activities and expenditure will be evidence to support your claim. You can make use of less formal records, such as screenshots, instant messaging histories, and exported content from task tracking or project management tools.

To support a claim for the R&D Tax Incentive, we expect you to be able to provide evidence that your core and supporting R&D activities meet each requirement of the legislation. Examples of evidence that may support eligibility are laid out below.

Table 1. For core R&D activities (generating new knowledge and conducting experiments)

Eligibility requirement	Examples of evidence
<p>The outcome of the experiments (whether the hypotheses were true or false), could not have been known or determined in advance.</p> <p>This requirement is assessed using the standard of a competent professional on the basis of their knowledge, networks, or information they could reasonably gain access to.</p>	<ul style="list-style-type: none">• Records of literature reviews• Email exchanges with industry experts• Screenshots of questions posted on tech blogs• Details of failed attempts to use existing technology
<p>Experiments are conducted for the purpose of generating new knowledge.</p>	<ul style="list-style-type: none">• Minutes of board, project or team meetings where the need to conduct experiments was discussed
<p>The activities follow a systematic progression of work from hypothesis to experiment, observation and evaluation and lead to logical conclusions.</p> <p>It is important to show that you conduct specific experiments to test your hypotheses.</p>	<ul style="list-style-type: none">• Records of each step of your experimental activity, e.g. what the hypothesis was, how you tested it, the data from your experiment, how it was analysed, whether the hypothesis was proven true or false, and how these results were used to create any new hypotheses• Code repositories or software versions with comments including weaknesses that were identified and rectified in successive versions• Testing strategy and approach• Project management documentation such as GANTT charts
<p>Expenditure is clearly linked to an eligible R&D activity.</p> <p>Where some or part of the work is being undertaken by contractors, you need to keep written agreements that set out the work to be undertaken, who performed the work and where it took place. If this applies to you, you should also look at For whom are the R&D activities conducted on the ATO website.</p>	<ul style="list-style-type: none">• Design and scoping documents showing how purchased items were used in experiments• Exported content from task tracking or project management tools (demonstrating the % of time that staff worked on eligible activities)• How you determined what % of your utilities (excluding capital costs) was used for eligible R&D activities• Contracts for any work, or parts of the work, undertaken by contractors

Table 2. For supporting R&D activities (directly related to a core R&D activity)

Eligibility requirement	Examples of evidence
Supporting R&D activities directly relate to an eligible core R&D activity.	<ul style="list-style-type: none"> Technical records showing how and why the supporting R&D activity is directly related to one or more core R&D activities <ul style="list-style-type: none"> for example, why a GUI that is being claimed was necessary to conduct the experiments in a core R&D activity
<p>Where supporting R&D activities:</p> <ul style="list-style-type: none"> are excluded from being core R&D activities produced goods or services, or are directly related to producing goods or services. <p>The <i>dominant purpose</i> of conducting these activities was to support a core R&D activity (rather than it being for a purpose of secondary importance – to satisfy the dominant purpose test the purpose of undertaking the activities must be the most important purpose).</p> <p>This is often a requirement where software has been developed to facilitate an experiment in an eligible core R&D activity on a production line.</p> <p>You must only claim expenditure for those goods or services which are used in the eligible R&D activities and not for commercial production runs, and your documents should support this.</p>	<ul style="list-style-type: none"> Production run sheets and quality control sheets that identify which units were used for experiments and which were to be sold Where saleable goods are produced in an activity, your records need to show that you only produced sufficient numbers for the experiments and not for any commercial activity

We expect you to keep records of experiments and their outcomes at or around the time you conduct them.

Getting more information

- Subscribe to the R&D Tax Incentive Information Bulletin and receive updates on guidance, taxpayer alerts, program trends, and topical news.
- Attend an R&D Tax Incentive information session to learn more about the R&D Tax Incentive and how to apply. Register to attend or be notified about an upcoming information session for businesses and tax agents.
- Read the legislation. This guide is an overview intended to help you more easily and quickly determine your eligibility. This guide does not cover every situation and is limited to general advice only.
- You must always assess your activities against the criteria in the legislation. The definition of 'R&D activities' is contained in the R&D section (Division 355) of the Income Tax Assessment Act 1997.
- The law that sets out the conditions for overseas activities is in the Industry Research and Development Act 1986.
- The Commonwealth disclaims all liability for any loss or damage arising from you or anyone else erroneously relying on this guide or any statement contained in it.
- It is ultimately your responsibility to seek and obtain your own advice about the eligibility of your activities for the R&D Tax Incentive.