

Draft guidance on “production” to replace current CIR 81350

Introduction

1. The BIS(DTI) guidelines (“the guidelines”) set out the definition of R&D for tax purposes. In doing so they define a number of other related concepts.
2. Paragraph 28(c) of the guidelines excludes the “production and distribution of goods and services” from being R&D for tax purposes. But the guidelines do not define “production”.
3. This guidance explains HMRC’s understanding of the term “production” in circumstances where R&D activity continues after a company commences the process of making goods or services that are supplied to a customer.
4. Paragraph 34 of the guidelines defines when an R&D project ends as follows

‘R&D ends when knowledge is codified in a form usable by a competent professional working in the field, or when a prototype or pilot plant with all the functional characteristics of the final process, material, device, product or service is produced.’
5. There can be circumstances where R&D is taking place but when goods are nevertheless being created that are supplied to a customer. In such circumstances it will be necessary to determine what, if any, part of that activity falls within the R&D project so that its costs may qualify for R&D relief. Each situation should be considered on its merits and the facts available and consequently the following should be considered as a general guide to determining the R&D content of a particular project and should be read as such.

The basic test

6. Paragraph 3 of the guidelines states that R&D occurs when a project seeks an advance in science or technology. Paragraph 4 states that the activities that are R&D are those that directly contribute to the advance, through the resolution of scientific or technological uncertainty.
5. If the main point of the activity is experimentation i.e. to contribute to making an advance in science or technology rather than to produce goods or services for supply to a customer then there are circumstances when the activity can be accepted as forming part of the R&D process.
6. HMRC considers that this could be the case if :
 - there is real, quantifiable and significant scientific or technological uncertainty about the successful outcome of the activity at that point in the process, and
 - the activity seeks to resolve that uncertainty

7. The activity may be necessary, for example, to test the R&D or indeed to carry it out (e.g. if it is necessary for a process to run in order for the R&D to take place)

Manufacturing processes

8. Where production trials are necessary to test whether the scientific or technical advance has been made, the whole or part of the expenditure on such a trial may be on R&D, depending on the degree of uncertainty existing within the process at a particular time.

9. In general we would expect the degree of uncertainty to fall throughout the trial. In some cases the uncertainty may be almost extinguished shortly after the trial has started and in such circumstances only a small proportion of the trial costs would be expenditure on R&D. In others, real uncertainty may persist until the very end, and most of the expenditure will therefore be on R&D.

10. The proportion of the costs that is on R&D should therefore be determined after considering the facts of the individual project. If the project is typical of others carried out previously, the company may be able to point to evidence of real uncertainty arising in such processes and past losses incurred at that point in the process which will support the activity being R&D and/ or help to quantify the amount of expenditure that is on R&D.

Example

11. The company conducts a manufacturing trial to determine whether the R&D carried out has been successful. Past history has shown that trials at a particular level of production over a particular timescale are needed to be sure that the uncertainty has been overcome. The trial will last several days to ensure that not only has the advance been made but that the production process will result in an acceptable output in terms of quality and quantity by a process of fine tuning to produce optimal output.

12. The trial costs will be allowable up to the point that the uncertainty has been overcome but not thereafter. The costs should be apportioned on an appropriate basis. A trial however where there is no uncertainty but which is undertaken to test the robustness of the manufacturing process would not attract R&D relief.

First in class

13. The term 'first in class' normally refers to high value items of a similar design and specification where it is not commercially feasible to construct the item purely for R&D purposes.

14. Under the guidelines construction of a prototype falls within paragraph 27(a) which provides that activity to create equipment can be treated as "directly contributing" to seeking an advance in science or technology, but only if it is created solely for use in the R&D.

15. 'First in class' items however are intended from the outset to be fully functional and commercially saleable products, built to final specifications and intended for sale to a customer. They will therefore not meet the 'created solely for use in the R&D' criterion and the total build costs will not qualify under paragraph 27(a).

16. However, building a 'first in class' item may clearly entail a significant level of innovation, and the commercial project required to do so may include a number of R&D projects which seek to make advances in science or technology through overcoming scientific or technological uncertainty. Based on the principles described above, the costs, if they fall into qualifying categories of expenditure, of attempting to overcome these separate uncertainties would qualify for R&D relief, even though the total build costs would not. It will be for the company to demonstrate which activities are R&D within the wider commercial project.

Example

17. The company builds specialist machinery to work in very low temperatures. It is approached to build a one off machine to work in temperatures previously thought to be impossible.

18. Because of the high cost of building the machine it is not commercially viable to build a prototype for R&D purposes only and therefore embarks on building a version for sale to the customer.

19. In building the machine the company uses already known techniques (some of which have already attracted R&D Relief) but needs to make advances in science or technology to produce what is required. The company can claim for the costs of making the advances and overcoming the uncertainties but not for the total build costs.

20. The R&D content of the machine will be dependant on the level of innovation involved and the costs incurred in making the advance(s) in science or technology. The R&D cost should be calculated on an appropriate basis.