HMRC internal manual

Corporate Intangibles Research and Development Manual

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CIRD81350 - R&D tax relief: conditions to be satisfied: production and distribution of goods and services

Introduction

1. The BIS(DTI) 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 and distribution’.

3. This guidance explains HMRC’s understanding of this term in circumstances where R&D activity continues after a company commences the process of making goods or services that are for supply to a customer. Unless otherwise stated, references to ‘paragraphs’ are to paragraphs of the BIS Guidelines (‘the guidelines’)

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. It is clear, however, from experience that there can be circumstances where an R&D project is still taking place but the company is nevertheless carrying on activity a consequence of which is that goods or services are created that are supplied to a customer. In such circumstances the test in paragraph 34 of the guidelines is less helpful in practice, and it will be necessary to split the costs of the activity, ie to determine what part of that activity falls within R&D (so that its costs may qualify for R&D relief) and what part does not fall within R&D (so that its costs do not qualify).

6. From 1 April 2015 it will also be necessary to split the costs of the consumable items used in the R&D such that the cost of any of the material that forms some part of the goods or services supplied to a customer does not qualify for R&D relief.

The basic test

7. 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.

8. To the extent that (and only to the extent that) an activity contributes to making an advance in science or technology, as well as producing/ distributing goods or services for supply to a customer, the activity can therefore be accepted as forming part of the R&D project.

9. HMRC considers that for this to be the case there must be evidence of scientific or technological uncertainty which the company is seeking to resolve, as part of an R&D project, by undertaking the activity. A process may, for example, need to be run, to test the R&D or it may be necessary for it to be run to carry it out.

10. Each situation should be considered on its merits and the facts available, and consequently the following should be considered only as a general guide to determining the R&D content of a particular commercial project.

The following situations are most commonly met in practice but each case should be considered on their individual facts.

1. Manufacturing process

11. Where trials are necessary to test whether a 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.

12. In general it is however unlikely that the whole end to end process directly contributes to resolving the scientific or technological uncertainties as set out in paragraph 26.

13. The proportion of the costs associated with the R&D activities should therefore be determined after considering the facts of the individual project. In particular, whether or not the costs of

consumable items used in such trials are R&D expenditure will depend on what happens to the manufactured items produced during the course of the trial. Where these goods or services are disposed of as the usual products of the manufacturer then the costs of the consumables included in those goods or services are not treated as costs of R&D.

Example

14. 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.

15. The trial costs will be allowable up to the point that the scientific or technological 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 validate the manufacturing process would not attract R&D relief.

16. The trial costs may include the costs of the consumable items used in the production process. If some of the output of the trial is sold as a commercial product of the company then an apportionment will need to be made between the costs of the items included in the product or products sold, and those not included.

17. Where the output from the trial is sub-standard but is nevertheless sold as scrap, or some other recyclable by-product of the trial is sold, then the costs of the consumables included remain as R&D expenditure.

2 Prototypes

18. 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.

19. A prototype in the sense of the guidelines would then be a unit that is designed and constructed for the R&D project and not for sale. It is intended as a single purpose item. This is not affected if, after the trial is completed, the intention changes and the prototype is subsequently used for some other purpose (eg used as a demonstration model at a trade fair) Equally this purpose is not affected should the prototype be lent, or indeed given to a potential customer or another party for evaluation where this is in exchange for information derived from those further trials.

3. First of class

20. The term ‘first of class’ normally refers to high value prototype items in which there are elements of R&D and elements of commercial production. For example, it may not be commercially feasible to construct the first item with most of the characteristics of the new product purely for R&D purposes because of its cost (in terms of money or time) so a unit is built that contributes to the R&D effort but is subsequently sold as a final unit.

21. This is different from a ‘prototype’ in the sense of the guidelines because ‘First of class’ items are intended from the outset to be for sale to a customer and not solely for use in R&D. Therefore in most cases the total build costs of a ‘first of class’ item are not expected to qualify for R&D tax relief as they will not exist purely to resolve scientific or technological uncertainties but will also be used to meet a customer order.

22. However, building a ‘first of 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 a make advances in science or technology through overcoming scientific or technological uncertainty. Based on the principles described above, these costs, if they fall into qualifying categories of expenditure, would qualify for R&D relief - while the other costs would not. It is unlikely therefore that the total build costs would qualify for R&D relief and it will be for the company to demonstrate which activities are items within the total build costs which directly contribute to resolving the technological or scientific uncertainties.

23. Where these qualifying activities involve the use of consumable items then the cost of these consumables qualify for relief, except for those items that are then included in the ‘first of class’ product that is finally transferred to the customer.

Example

24. The company builds specialist machinery to work in very low temperatures. It is approached to build a one off machine to work in temperatures which had not previously been achieved by that technology.

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

26. In building the machine the company makes as much use of technologies used in previous products as possible (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 the costs of activities which do not directly contribute to resolving the technological or scientific uncertainties and

therefore fall within the scope of production of goods and services as set out in Paragraph 28(c).

27. Resolving the uncertainty may, for instance, involve the design, build and testing of versions of a sub-assembly. The costs of the materials and other consumable items used in this process are therefore allowable costs, apart from the cost of the consumables included in the sub-assembly as finally fitted to the product.

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

4. Provision of services

29. Cases involving the provision of services should be considered in exactly the same way as those involving the provision of goods.

Example

30. The company is a firm of architects, engaged to design high value, bespoke buildings. It is approached by a customer to design a building intended to be carbon-neutral, and also to incorporate a number of innovative design features.

31. A large proportion of the design incorporates existing knowledge and processes. However, given the complexity, there are also key areas where advances in technology are being sought.

32. The company can claim for the costs of making the advances and overcoming the uncertainties, but not for its total expenditure on meeting the requirements of the customer.

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