B.5. Transfer Pricing Considerations on Intangible Property

B.5.1.Introduction

B.5.1.1. Intangibles affect nearly every aspect of economic activity in the twenty-first century. Intangibles have become a major source of sustainable competitive advantage for many firms. The importance of intangibles in the economy has been growing for decades in a number of sectors. The information and communication technology (ICT) revolution has made some technologies cheaper and more powerful, enabling improvement of business processes and boosting innovation across virtually all sectors of the economy. This technological evolution has made intangibles increasingly important profit drivers in many individual businesses. It is therefore necessary to give careful consideration to intangibles when conducting a transfer pricing analysis.

B.5.1.2. Transfer pricing issues can arise when MNEs develop, acquire, exploit or transfer intangibles. Various entities within an MNE group may participate in intangibles development through functions like research, development and marketing, providing funding for acquisition and development of intangibles, and exploiting intangibles in a wide range of business activities. These activities should be rewarded on an arm's length basis. The business operations of one member of an MNE group may require the use of intangibles developed or owned by other group members. Use by one member of the MNE group of intangibles belonging to or developed by other group members should be compensated on an arm's length basis.

B.5.1.3. Transfer pricing issues relating to intangibles should be resolved using the fundamental transfer pricing principles contained in Chapters B.1, B.2 and B.8 of this Manual. However, as intangibles may be unique, may be difficult to value and may be very important to the successful operation of the MNE group's business, transfer pricing issues related to intangibles can be very challenging for both tax administrations and taxpayers in developed and developing countries. This Chapter therefore supplements the general principles contained in earlier Chapters to provide special practical guidance on transfer pricing matters related to intangibles.

B.5.1.4. In carrying out a transfer pricing analysis involving intangibles it is necessary to consider: (i) the identification of the specific intangibles involved, (ii) the ownership of intangibles within the MNE group, (iii) the value of the identified intangibles, (iv) how the intangibles contribute to the creation of value by the MNE group, and (v) the identity of the members of the MNE group that contribute to intangible value and how they should be rewarded. This framework for analyzing transfer pricing issues related to intangibles is discussed in the following sections.

B.5.2. **Identifying Intangibles**

Definition of intangibles

B.5.2.1. Article 9 of the UN Model Tax Convention is concerned with the conditions of transactions between associated enterprises, not with assigning labels to such transactions. The key consideration is whether a transaction conveys economic value from one associated enterprise to another, whether that benefit derives from tangible property, intangibles, services or other activities. As is the case with other transfer pricing matters the analysis of cases involving the use or transfer of intangibles should begin with a thorough identification of the commercial and financial relations entered into by the associated enterprises and the economically relevant characteristics attached to those relations. Such an approach is pursued in order to accurately delineate the actual transaction involving the use or transfer of intangibles. However, whether a particular item falls within the definition of intangibles or not will have little consequence for the analysis, since the principles in Chapters B.1, B.2 and B.8 will apply in any event. The following definition is provided primarily to aid in discussion rather than to create a substantive difference between cases involving intangibles and those that do not.

B.5.2.2. Difficulties can arise in a transfer pricing analysis as a result of definitions of the term intangibles that are either too narrow or too broad. If an overly narrow definition of the term intangible is applied either taxpayers or governments may argue, incorrectly, that certain items fall outside the definition and may therefore be transferred or used without separate compensation, even though such use or transfer would give rise to compensation in transactions between independent enterprises. If too broad a definition is applied, either taxpayers or governments may argue, again incorrectly, that the use or transfer of an item in transactions between associated enterprises should require compensation in circumstances where no such compensation would be provided in transactions between independent enterprises.

B.5.2.3. For the purposes of this chapter the term “intangible” encompasses something which is neither a physical nor a financial asset, which is capable of being owned or controlled for commercial purposes, whose use or transfer would be compensated had it occurred between independent enterprises in comparable circumstances.[1] Whether something is recognized as an intangible for legal or accounting purposes is an informative starting point but not determinative. It is not

[1] This definition is the same as the one in the OECD-G20 Actions 8 to 10 Report released in October 2015.

the case that all valuable intangibles are legally protected, registered or recognized for accounting purposes.

B.5.2.4. It is recognized that some countries use a different definition in their domestic law. However, irrespective of whether an item is characterized as an intangible under domestic law, the transfer pricing analysis will be based on the definition above. Of course, other elements may need to be taken into account if they would affect pricing between unrelated parties. See for example the items discussed in section B.5.2.20.below.

Categories of intangibles which are commonly referred to

B.5.2.5. Notwithstanding the above, it is sometimes the case that labels, such as those described in paragraph B.5.2.7., are commonly applied to certain intangibles, often those with a legal status. While such categorization may be helpful in identifying intangibles as a starting point of the analysis, the approach contained in this chapter for determining arm's length prices in cases involving intangibles does not rely on any categorization. As a result, no attempt is made to delineate with precision various classes or categories of intangibles or to prescribe outcomes that turn on such categories. The categories of intangibles described below are ones often considered in transfer pricing analyses involving intangibles. They are illustrative and not intended to be comprehensive.

B.5.2.6. From a transfer pricing standpoint it should be emphasized that generic references to the categorization as outlined below do not relieve taxpayers nor tax administrations from carrying out a thorough transfer pricing analysis in order to identify intangibles as accurately as possible, taking into account the risks actually assumed and controlled, associated with the functions performed and assets employed. Similarly, the arm's length principle does not apply differently depending on the type of intangibles at stake.

B.5.2.7. A common distinction is made between legally registered and non-registered intangibles. One category of intangibles includes intellectual property such as patents and trademarks, which can be registered. Other types of intangibles, such as copyrights or legal rights (including licenses) covering the utilization of patents, literary works, databases, trade secrets or designs can be legally or contractually protected even if not registered. These types of intangibles can be expressly registered, contractually acknowledged or legally protected, depending on the applicable national laws and treaties.

B.5.2.8. As indicated above, it is not the case that all valuable intangibles are legally protected and/or registered. Know-how and trade secrets are proprietary information

or knowledge that assist or improve a commercial activity, but that an enterprise may – for a variety of business reasons – choose not to register. Such know-how may nonetheless contribute substantially to the success of the enterprise and be of significance in some situations for transfer pricing purposes.

B.5.2.9. Notwithstanding the fact that the availability and extent of contractual forms of protection may affect the value of an asset such as an intangible (and the returns attributable to it), the existence of any such contractual protection is not a necessary condition for an item to be characterized as an intangible for transfer pricing purposes.

B.5.2.10. Conceptually, intangibles can cover a wide spectrum encompassing legally defined items such as patents and trademarks up to broader categories such as best practices, internal procedures, human capital, non-contractual relations to customers or suppliers and network effects. The latter category of items are not necessarily legally defined but may, taking into account particular facts and circumstances, convey value that would be compensated between parties at arm's length, and, as such, should be considered as a relevant economic characteristic in any comparability analysis involving the use or transfer of intangibles.

B.5.2.11 In considering transfer pricing matters certain intangibles may sometimes be referred to as either (i) trade intangibles or (ii) marketing intangibles.

B.5.2.12. Trade intangibles may be created through testing and research and development (R&D) activities. The developer may try to recover the expenditures on these activities and obtain a return thereon through manufacturing and selling products, service contracts, or licensing out.

Marketing intangibles

B.5.2.13.Marketing intangibles may be created by marketing activities, can aid in the commercial exploitation of a product or service, and/or may have an important promotional value for the product concerned. Depending on the facts and circumstances of the case marketing intangibles may include, e.g., trademarks, trade names, customer lists and customer relationships as well as proprietary market and customer data that is deployed in marketing activities and in selling goods or services to customers.

B.5.2.14. there can be a combination of central and local marketing activities in MNE groups. In some cases the local marketing team performs marketing activities which are comparable to the activities of comparable uncontrolled distributors. In other cases, the local marketing team carries out broader marketing activities than the ones of uncontrolled distributors, e.g. autonomously develops marketing campaigns

or customizes the commercial offering beyond the guidelines set centrally and accordingly incurs significantly greater expenses than comparable uncontrolled distributors. In the latter case, the local marketing team may succeed in developing a marketing intangible.

B.5.2.15 A separate concept is whether a particular intangible will be regarded as "unique and valuable". For transfer pricing purposes, a "*unique and valuable intangible*" is an intangible which; (unique) is not present in otherwise comparable uncontrolled transactions and; (valuable) leads to significant expected premium value in business operations.

B.5.2.16 When looking at local marketing activities undertaken by a distributor, it should be determined:

- whether or not the marketing activities of Distributor X create a separate intangible distinct from the foreign-owned brand,
- irrespective of the answer to the first question, whether or not the marketing activities of Distributor X that are in excess of those of comparable uncontrolled distributors should attract a return greater than those comparables. See paragraph B.5.2.14. above.

B.5.2.17. Depending on the facts and circumstances of the case, the broader marketing activities of the Distributor may give rise to differing outcomes:

a) The activities may lead to the creation of a local marketing intangible but not attract a return greater than the return of otherwise comparable uncontrolled distributors, for instance if the resulting intangible is not unique, despite the expenses incurred being greater than those of comparable uncontrolled distributors;

b) The activities may lead to the creation of a local marketing intangible (distinct from the foreign-owned brand) and attract a return greater than the one of otherwise comparable uncontrolled distributors, for instance if the resulting intangible is unique and valuable.

c) The activities may not lead to the creation of a local marketing intangible and not attract a return greater than the return of otherwise comparable uncontrolled distributors, for instance if the additional value created is captured by the Distributor through anticipated increased sales volumes;

d) The activities may not lead to the creation of a local marketing intangible but attract a return greater than the one of otherwise comparable

uncontrolled distributors, for instance if the Distributor 's marketing activities are a valuable contribution to the foreign-owned brand;

Example 1:

B.5.2.18. *Distributor X distributes branded products for which the brand is owned by a foreign affiliated enterprise. Assume that Distributor X has an innovative marketing team whose activities go beyond the implementation of the guidelines set by the brand owner. Distributor X successfully develops customized campaigns for the local market in which Distributor X operates. As a consequence, Distributor X is very successful in its market and its marketing expenses are significantly greater than the ones of otherwise comparable uncontrolled distributors. Assume that the incremental marketing expenses are not reimbursed by the foreign brand owner.*

In this case, the determination will likely be either solution b) or d) of the above list, i.e. Distributor X would attract a return greater than the one of otherwise comparable uncontrolled distributors.

Example 2:

B.5.2.19. *Distributor Y distributes branded products for which the brand is owned by a foreign affiliated enterprise. Assume that the foreign brand owner runs a comprehensive global marketing team and that Distributor Y solely implements locally the marketing campaigns which are designed by the foreign brand owner. Furthermore, the foreign brand owner reimburses Distributor Y for incremental marketing expenses (if any) incurred above the ones of comparable uncontrolled distributors.*

In this case the determination will likely be either solution a) or c) of the above list, i.e. Distributor Y would not attract a return greater than the return of otherwise comparable uncontrolled distributors.

Market features

B.5.2.20. The specific characteristics of a given market may affect the arm's length conditions of a transaction between associated enterprises in that specific market. In conducting a transfer pricing analysis taking into account the specific market features in which one or more of the associated enterprises is operating one should distinguish between the local market characteristics, which are not intangibles, and other features – such as contractual rights granting exclusivity in marketing certain products or government licenses – which meet the definition of intangibles relevant for transfer pricing purposes. While some of the economic circumstances existing in a market (e.g. cost of labor) may give rise to location savings, others may trigger the

need to focus on comparability issues not directly associated with location savings. See para. B.2.3.2.50. of the Manual.

Goodwill

B.5.2.21.The manner in which an intangible comes into existence from an accounting standpoint is not relevant to the determination of whether the item is an intangible for transfer pricing purposes. In this respect, a significant item often arising in discussions regarding the transfer pricing aspects of intangibles in the context of a business restructuring relates to the notion of goodwill.

B.5.2.22. Depending on the context, the terms "goodwill" and "ongoing concern value" can be used to refer to a number of different concepts.

- In some accounting and business valuation contexts, goodwill reflects the difference between the aggregate value of an operating business and the sum of the values of all separately identifiable tangible and intangible assets (see example at paragraph B.5.2.29. below).
- Alternatively, goodwill is sometimes described as a representation of the future economic benefits associated with business assets that are not individually identified and separately recognised.
- In still other contexts goodwill is referred to as the expectation of future trade from existing customers.
- The term ongoing concern value is sometimes referred to as the additional value that attaches to property by reason of its existence as an integral part of an ongoing business activity.
- It is also sometimes described as the value attributable to the ability of a trade or business (or a part of a trade or business) to continue functioning or generating income without interruption notwithstanding a change in ownership, aside from any intangibles.
- It is also sometimes referred to as the value of the assembled assets of an operating business over and above the sum of the separate values of the individual assets.

B.5.2.23. It is generally recognised that goodwill and ongoing concern value cannot be segregated or transferred separately from other business assets.

B.5.2.24. It is not necessary for purposes of this Chapter to establish a precise definition of goodwill or ongoing concern value for transfer pricing purposes or to

define when goodwill or ongoing concern value may or may not constitute an intangible. It is important to recognise, however, that an important and monetarily significant part of the compensation paid between independent enterprises when some or all of the assets of an operating business are transferred may represent compensation for something referred to by one or another of the alternative descriptions of goodwill or ongoing concern value. When similar transactions occur between associated enterprises, such value should be taken into account in determining an arm's length price for the transactions. The absence of a single precise definition of goodwill makes it essential for taxpayers and tax administrations to describe specifically relevant intangibles in connection with a transfer pricing analysis, and to consider whether independent enterprises would provide compensation for such intangibles in comparable circumstances.

B.5.2.25. When the reputational value, sometimes referred to as goodwill, is transferred to or shared with an associated enterprise in connection with a transfer or licence of a trademark or other intangible that reputational value should be taken into account in determining appropriate compensation.

B.5.2.26. If features of a business such as a reputation for producing high quality products or providing high quality services allow that business to charge higher prices for goods or services than an entity lacking such reputation, and such features might be characterised as goodwill or ongoing concern under one or another definition of such terms, such features should be taken into account in establishing arm's length prices for sales of goods or the provision of services between associated enterprises whether or not they are characterised as goodwill. In other words, all contributions of value should be compensated at arm's length irrespective of how they are labelled.

Purchase Price Allocation

B.5.2.27. When a multinational enterprise acquires a company, group of companies or business it may prepare a Purchase Price Allocation for financial accounting purposes (commonly referred to as a "PPA"). Such PPA typically provides a financial valuation of identified underlying tangible and intangible assets. In the event where one or more of the intangibles are further transferred after the acquisition, for instance as part of a business restructuring, the question arises as to the extent to which the PPA will provide a useful basis for valuation of the further transferred intangible(s).

B.5.2.28. Goodwill under Purchase Price Allocation for financial accounting purposes is mechanically defined as the difference between the purchase price (typically of a company or a business) and the valuation of identified underlying tangible and intangible assets. While the PPA can be a useful starting point to identify intangibles and their value, it is worth noting that any mis-valuation of any of the identified underlying tangible and intangible assets (due, for example, to unaccounted synergies, other unaccounted sources of value or measurement errors) mechanically affects goodwill valuation as illustrated below.

- ***Illustration of PPA***

B.5.2.29. *Assume Company A is acquired by Company B for a price of 1,000. In its PPA for consolidated financial accounts' purposes, Company B allocates to underlying tangible and intangible assets the purchase price it paid for Company A. In doing this, valuations are made for identified assets of Company A. Goodwill will be recognized for the residual value as follows:*

Tangible assets:	*100*
Sum of Patents 1, 2 and 3 (if valued separately):	*150*
Trademark:	*250*
Unallocated "goodwill"	*500*
Total purchase price allocated:	*1,000*

B.5.2.30 *Assume that in the post-acquisition context the patents will be exploited as a bundle in order to derive synergetic benefits. Assume that while the sum of the individual values of Patents 1, 2 and 3 is 150, their value, if sold as a bundle, would be 250, because .of incremental value that can be derived from the interrelated use of the patents.*

B.5.2.31. *In such a case, if the transaction analyzed is the sale of Patents 1, 2 and 3 as a bundle, part of the PPA measure of goodwill value should be allocated to the value of the bundle. The result would be the following:*

Tangible assets:	*100*
Patents 1, 2 and 3 (if valued as a bundle):	*250*
Trademark:	*250*
Unallocated "goodwill"	*400*
Total purchase price allocated:	*1,000*

Example: MineCo

B.5.2.32. *Assume MineCo owns a government license to carry out oil drilling activity in Ruritania as well another government license for the exploitation of the oil rig network existing within the country. The oil drilling license has a standalone market value of 70 as opposed to the oil rig license which has a market value of 30. MineCo does not own any other asset.*

B.5.2.33. *ExtraCo, an independent competitor of MineCo, acquires 100 percent of the equity interest in the latter company for a price of 150. In its PPA realized further to the acquisition, ExtraCo attributes 70 to the license associated with the drilling activity, 30 to the oil rig license and the remaining amount of 50 to goodwill arising because of the existence of synergies created between the drilling and oil rig licenses taken together.*

B.5.2.34. *As an immediate follow-up of the acquisition, MineCo transfers both the above licenses to Extra1, a subsidiary of ExtraCo. In carrying out a transfer pricing analysis related to determining the arm's length consideration to be paid by Extra1 with respect to the transaction taking place with MineCo, the taxpayer values the combined transaction at 100, the market value of the two licenses considered separately.*

B.5.2.35. *In this case in calculating the arm's length consideration the purported goodwill associated with the bundled transfer of licenses by MineCo should be taken into account, as a party at arm's length would be willing to pay more than 100 for combined assets that have a value of 150.*

Group synergies, including procurement activities

B.5.2.36. Group synergies are not an intangible, but they can be significant in the analysis of the transfer pricing aspects of intangibles. Generally, because of the existence of an MNE group, the associated enterprises comprising such groups may benefit from the proactive or passive interactions amongst group members which are not accessible to comparable third party enterprises. This type of synergy does not constitute an intangible.

B.5.2.37. Group synergies are particularly relevant to central procurement. For instance, group synergies arising as a result of combined purchasing power or the scalability of a certain activity, increased borrowing capacity due to being part of an

MNE group, and so forth. To this end it is important to distinguish, on the one hand, between:

i. incidental benefits which are arising simply because of group affiliation; and

ii. economic advantages arising due to the deliberate concerted action of one or more associated enterprises that are part of the MNE group resulting in what is normally labeled as “group synergy”.

B.5.2.38. In the case under (i), an associated enterprise should not be deemed to have received an intra-group service, and should not be required to make an intra-group payment for such a service, simply because it has access to economic advantages by virtue of its group affiliation.

B.5.2.39. In the case under (ii), however, there may be a clearly identifiable economic advantage due to the exact identification of the source of the activities which have been put in place by one or more of the associated enterprises in the MNE Group and which can be quantified from a transfer pricing standpoint in the light of an accurate comparability (including functional) analysis at the level of each of the relevant associated enterprises.

B.5.2.40 (ii) (a) ***Simple central procurement function***: For instance, assume that the MNE Group N decides to implement a policy of cost savings. In this respect, it incorporates Company P in Country L to centralize the procurement function and take advantage of volume discounts that arise solely because of the MNE group’s aggregated purchasing. Assume that Company P does not take title of the raw materials from suppliers. The concerned group members directly acquire the raw materials from the suppliers under the conditions applying to the group.

B.5.2.41. In this scenario, Company P performs a deliberate concerted action which should generally be reflected in the pricing of a procurement fee to be paid by the group members to Company P. The arm’s length consideration of Company P would typically be an administrative fee and should be less than the aggregated cost savings of the MNE group. This reflects the fact that in this scenario the most important driver in the discounts is the volume purchased by the group, not the services provided by Company P.

B.5.2.42 (ii) (b) ***Strategic, high value added procurement function***: Assume now that Company P recruits procurement specialists with extensive experience in managing suppliers and cost cutting in the industry. Such procurement specialists build up expertise in the area of demand requirements for Group N, supply offerings and supplier contacts regarding Group N raw materials, industry supply chain

strategies, etc. On the basis of their expertise they design the procurement strategy specifically for Group N based on demand, product specifications and price; they carry out the vendor selection and contract negotiation; and they perform vendor evaluation and manage quality control functions. Company P therefore implements a deliberate concerted action of Group N which would warrant Company P receiving from other members of the group arm's length remuneration that is appropriate in view of the value created by Company P. Depending on the detailed facts such compensation may, but would not necessarily, include a share of the savings derived due to Company P's actions. This reflects the fact that in this scenario, not only the volumes of purchases but also the know-how deployed by Company P both contribute to the ability to obtain discounts. In this case the know-how of Company P is an intangible which warrants remuneration. The volume effect, however, is not an intangible and the benefit associated with that aspect should go to the individual group company or companies purchasing the products –].

(ii) (c) Same fact pattern as in (ii) (b), and additionally, Company P takes title of the procured goods and through its personnel controls risks centrally regarding amongst others volume commitments, price fluctuations, exchange rate risks, quality control risks, etc. and has the financial capacity and capability to assume these risks. Company P resells the raw materials it purchases to other group members. In such cases, Company P would earn a profit margin on the products resold to the group members. Such profit margin should be appropriate in view of the value created by P, including the fact that it bears the working capital to fund inventory and reflect the range of risks associated with the procurement. Depending on the detailed facts, such profit margin may include a share of the anticipated savings derived due to Company P's actions, and may be an amount that is greater than under (ii) (b). This reflects the fact that in this scenario Company P is not only contributing value through its know-how but also through bearing inventory costs and associated risks.

Workforce in place

B.5.2.43. Another important aspect to be taken into account in a transfer pricing analysis can be the existence of a qualified and skilled workforce.

B.5.2.44. Generally, the existence of the workforce does not need to be remunerated separately for transfer pricing purposes. This is because the value provided by a workforce is typically reflected in the arm's length consideration to be paid for the goods produced or the services performed by the workforce. By contrast, rights under contracts – which may include the use of a workforce in place - could constitute an intangible within the meaning of paragraph B.5.2.3. of this Chapter.

B.5.2.45 Another situation concerns the transfer of an assembled workforce, e.g. in the context of a business restructuring. Such a transfer may be justified for a variety of reasons, such as the possibility for the transferee of not hiring and training a new workforce. On the other hand the transfer of an assembled workforce may trigger some liabilities in the hands of the transferee in the event some contracts have to be terminated as part of the implementation of the business restructuring plan. In such a case the most appropriate transfer pricing method to be selected as well as the calculation of any potential indemnity has to take such elements into account.

B.5.2.46. From a transfer pricing standpoint it is important to distinguish between the transfer of an assembled workforce in the context of a business restructuring and the mere secondment of employees, which is common in any MNE group. As a general rule, it is very rare that a transfer of individual employees between members of an MNE group should be compensated beyond the mere reimbursement of the employment and other associated costs, or the remuneration required for the services carried out by the seconded employees.

B.5.2.47. The use or transfer of part or all of a workforce does not, in itself, constitute the transfer of intangibles. However, it can also be the case that the transfer of certain employees is accompanied by the transfer of intangibles such as know-how from one associated enterprise to another.

Example:

B.5.2.48. Assume that several employees of Company G have developed over the years a specific algorithm to accurately price derivative instruments. The algorithm is owned by Company G as it was developed by the individuals in their capacity as employees of Company G. Assume that the employees are seconded by Company G to the associated Company M. The secondment of the personnel from Company G to Company M does not constitute a transfer of an intangible.

B.5.2.49. Assume now that, as part of their secondment, the seconded employees, with the authorization of Company G, make the algorithm available to Company M to assist and use in its commercial operations. This may result in an intangible, i.e. the algorithm, being put at the disposal of Company M by Company G, for which arm's length consideration may need to be paid by Company M to Company G.

B.5.3. Ownership of Intangibles and Transactions Involving Intangibles

Analytical framework for transactions involving the use or transfer of intangibles between associated enterprises

B.5.3.1. Applying the arm's length principle to transactions involving the use or transfer of intangibles is not fundamentally different from applying it to transactions involving tangible assets or services. Indeed, the arm's length principle requires in both instances the performance of a thorough comparability analysis, with a specific focus on the identification of the entities performing functions, using or contributing assets (including funding), and assuming risks.

B.5.3.2. On the basis of the above, the guidance on the transfer pricing aspects of intangibles should be placed within the wider context of understanding the accurately delineated transaction including identifying, within the value chain, how associated enterprises make contributions in the form of functions performed, assets employed and risks assumed.

B.5.3.3. The framework for analyzing transactions involving the use or transfer of intangibles between associated enterprises requires undertaking the following steps:

(i) Fact finding relating to the intangible:

- Identify the specific intangibles involved in the transaction between associated enterprises (see Section B.5.2 above).
- Identify the legal ownership of intangibles based on registrations, contracts and other relevant documents; (see Sections B.5.3.7.- B.5.3.14. below);
- Identify specific contributions made with respect to DAEMPE (development or acquisition, enhancement, maintenance, protection and exploitation) of the intangibles involved (see Sections B.5.3.15. - B.5.3.16. below).

(ii) Fact finding relating to a transaction involving the use or transfer of intangibles between associated enterprises:

- Identify other contractual terms associated with the transactions (if any), including terms of payment and terms of use of the intangible being transferred or used;
- Identify the associated enterprises performing functions, using assets and contractually assuming risks in the transactions involving intangibles. The guidance in Chapter B.2 should be applied;

(iii) Assess consistency with the arm's length principle of the remuneration of the transaction involving the use or transfer of intangibles between associated enterprises:

- Assess the consistency between the terms of the relevant contractual arrangements and the actual conduct of the parties: i.e. determine whether the conduct of the parties is aligned with the contractual assumption of the economically significant risks in relation to the intangible, including whether they actually control and have the financial capacity to assume the risks;
- Based on the above, delineate the actual transaction between the associated enterprises involving the use or transfer of intangibles;
- Determine arm's length prices for the above-mentioned transactions consistent with each respective party's contribution to the economic value generated from the intangible (unless the exceptional circumstances described in Chapter B.2, section B.2.3.1.5 apply).

B.5.3.4. It is important to note that in the vast majority of cases involving an intra-group transfer of intangibles an arm's length result will be achieved by pricing the accurately delineated transaction.

B.5.3.5. However, in some exceptional circumstances, the tax authorities may potentially recharacterize the transaction according to its actual economic features. For a more detailed discussion on this issue, see paragraph B.2.3.1.5. of the Manual.

B.5.3.6. From a tax administration's standpoint there are clearly risks in recharacterizing transactions in the context of intangibles. The latter solution indeed may create an increased risk of double taxation, with no realistic prospect of cross-border relief in the event countries do not agree on a common set of principles. This could make the costs of doing business in the country sufficiently high to discourage cross-border trade and investment, with negative effects on development. As already stated in other parts of this manual, while it is for each country to determine its own tax system, the desire to avoid double taxation has been an important factor in the very broad acceptance of the arm's length principle internationally. See paragraph A.4.6. of the Manual.

Legal Ownership and Contractual Terms

B.5.3.7. Legal rights associated with an intangible provide a starting point for the analysis. These may be found in registrations, contracts or other communications among the parties, which may establish the legal owner of the intangible and describe the roles, responsibilities, and rights associated with parties to the transaction involving the intangible. Contractual payment terms (for example, licensing terms) may establish how receipts and expenses of the MNE are allocated, and the form and amount of payments. These contractual terms may indicate, for example, the party or parties entitled to unanticipated gains or losses from the exploitation of the intangible.

B.5.3.8. In the case of a licensed intangible there are two different intangibles, each having a different owner: the licensed intangible on the one hand, and the license rights held by the licensee on the other hand. The fact that an intangible is being licensed does not affect its legal ownership, but rather creates a separate right of use for the licensee.

B.5.3.9. The legal owner(s) will be considered to be the sole owner(s) of the intangible for transfer pricing purposes. If no legal owner is identified, then the member of the group that controls decisions concerning exploitation of the intangible and that has the practical capacity to restrict others will be considered the legal owner.

B.5.3.10. Legal ownership, by itself, does not confer any right ultimately to retain returns associated with intangibles, even though such returns may initially accrue to the legal owner according to the contractual terms. In other words, it is not the case that the legal owner of an intangible, purely by virtue of its ownership, is entitled to the returns associated with the intangible. In effect, it would not be consistent with the arm's length principle for the fruits of intangibles to be stripped away from entities which have developed or significantly contributed to the development of those intangibles by a mere paper transaction assigning legal ownership elsewhere. Instead, all contributions must be appropriately remunerated rather than exclusively remunerating only the legal owner..

B.5.3.11. Several types of returns are associated with an intangible, including for example, an appropriate return to development functions, an appropriate return to funding activities, an appropriate return to exploitation functions and an appropriate return to assuming risk (this last return can be positive or negative, depending on whether and to what extent risks materialize).

B.5.3.12. For instance, assume that the legal owner of an intangible did not fund its acquisition (whether from a third party or from an associated enterprise) or

development. Assume further that it does not assume any risk with respect to that intangible. In addition, assume that it does not perform any function other than the legal protection of the asset and in particular it does not perform any function in relation to the enhancement, maintenance, and direct or indirect exploitation of the intangible. In such a case the legal owner should not be entitled to share in any portion of the anticipated (ex ante) return associated with the development or acquisition, enhancement, maintenance, or commercial exploitation of the intangible, beyond the appropriate remuneration for its legal protection function. See sections B.5.3.34-B.5.3.49 for further elaboration.

Example RCo: R&D funding

B.5.3.13. *Assume RCo is a member of an MNE group engaged in R&D activities, manufacturing and distribution of high tech widgets. RCo funds its R&D activities. When RCo's R&D activities result in patentable inventions, all the rights in the patents are assigned to an affiliated enterprise LCo for no remuneration, which de facto acts as the IP Company of the group. LCo then grants to RCo a licence for RCo to use the patents in manufacturing and distribution activities. LCo does not perform any function in relation to the enhancement and maintenance or exploitation of the patents. LCo only employs two lawyers to perform the patent administration work required to register the intangibles generated by the ongoing R&D functions performed by RCo.*

B.5.3.14. *In this example an accurate delineation of the transaction would show that RCo performs all the relevant value-adding activities associated with the intangible and assumes all the significant risks. In particular, depending on the facts and circumstances of the case, one possible solution could be that the transfer of the legal ownership of the patents to LCo, taken together with the simultaneous license arrangement with RCo, reflects, in its true underlying economic determination, a patent administration service arrangement between RCo and LCo. As a result RCo should be entitled to the actual return associated with the commercial exploitation of the asset, minus an arm's length remuneration for the legal protection functions performed by LCo.*

The significance of Development, Acquisition, Enhancement, Maintenance, Protection and Exploitation of Intangibles

B.5.3.15. While the analysis of intangibles generally follows the same analytical path as for other types of transactions there are a number of aspects of intangibles that typically warrant scrutiny within the fact finding phase. These relate to:

- the **d**evelopment of or, alternatively, the **a**cquisition from third parties of intangibles (i.e., how the intangible came to be owned by the MNE group);
- the **e**nhancement of intangibles;
- the **m**aintenance of intangibles,
- the **p**rotection of intangibles, and;
- the **e**xploitation of intangibles (whether direct exploitation or indirect exploitation such as licensing out).

B.5.3.16. These areas for analysis are sometimes referred to as “DAEMPE” contributions. In order to evaluate transactions involving intangibles, it is important to understand all of these contributions, as some or all of them might reflect important contributions to value that must be appropriately remunerated. While DAEMPE activities might seem to be limited to functions, in fact they often reflect contributions of assets and the assumption of risks as well. For example a pharmaceutical company might commit to undertaking R&D in order to develop a potential blockbuster drug. This “D” reflects, in addition to the development functions (R&D), a commitment to contribution of assets to fund the development, and the assumption of potentially significant risks.

Note : DAEMPE and DEMPE

By referring to "DAEMPE" in the U.N. Manual there is no intention to diverge from the OECD-G20 guidance contained in the Final Report on BEPS Actions 8-10, but rather to clarify that intangibles can be acquired by an MNE group either through development activities or by an acquisition from a third party. See for instance paragraph 6.49 of the OECD-G20 October 2015 Final Report on BEPS Actions 8-10.

Functions, assets and risks contributing to DAEMPE

B.5.3.17. As discussed in Section 3C, other important steps in accurately delineating the transaction between associated enterprises involving the use or transfer of intangibles require identifying which associated enterprises contribute to DAEMPE. That is, it should be determined which entities perform functions, contribute assets and assume risks in the transactions involving intangibles.

B.5.3.18. The identification of important DAEMPE contributions may have a significant impact on the selection of the most appropriate transfer pricing method.

The relative importance of contributions with respect to DAEMPE will vary depending on the industry, the type of intangible, the stage in the life cycle of the intangible, and the multinational enterprise's value chain in relation to that intangible. Important functions can be either directly performed or outsourced by the legal owner of the intangible.

B.5.3.19. For example, a fully developed and currently exploitable intangible purchased from a third party may require no development, maintenance or enhancement. In this case, key functions in relation to the acquisition of the intangible are those necessary to select the most appropriate intangible in the market, to analyze its anticipated benefits, take the decision to take on the risk-bearing opportunity through purchasing the intangible and manage the actual conclusion of the acquisition. A key asset would be the funding required to purchase the intangible.

B.5.3.20. For self-developed intangibles important functions in relation to the development of the intangible are those necessary to select the most appropriate research and development project, to analyze its anticipated benefits, and take the decision to take on the risk-bearing opportunity through funding the development activities and the performance of the R&D function. A key asset would be the funding required to develop the intangible.

B.5.3.21. In respect of both acquired and internally developed intangibles, the type of return warranted by the provision of funding will depend on the extent of the functions performed and risk assumed by the funding entity. See paragraphs B.5.3.32 and B.5.3.33 for more details.

B.5.3.22. In some cases an acquired intangible may require some further development before it becomes fully exploitable. In such cases, a combination of contributions related to the acquisition and the development of the intangible will be needed.

Example: MMD

B.5.3.23. *Assume that MMD Co is a company engaged in the sports apparel industry in country Y. It owns a trademark "MMD" for which it designs and funds global marketing campaigns. The trademark MMD is well known in the market and attracts a premium return compared to its competitors. MMD Co performs R&D activities and designs and manufactures athletic footwear under the trademark "MMD". The footwear manufactured by MMD Co is sold in various markets through a network of third party retailers. MMD Co has an affiliated invoicing entity, SCo.*

Assume that SCo does not make any contribution to DAEMPE in relation to the MMD brand and to the shoe design. SCo solely performs invoicing activities.

B.5.3.24.*On the basis of the fact pattern described above a correct transfer pricing analysis should imply that SCo has no claim in relation to the return derived from the exploitation of the intangibles associated with the trademark "MMD", beyond an appropriate remuneration for its invoicing activities.*

Risks

B.5.3.25. A comparability (including functional) analysis would be incomplete unless the economically significant risks assumed by each party to the controlled transaction have been identified to delineate the actual transaction involving the use or transfer of intangibles.

B.5.3.26 The guidance in Chapter B.2, in particular the discussion of risk control and mitigation and of financial capacity to assume risk, applies to the analysis of intangibles. Risks that may be especially relevant relating to transactions involving intangibles include:

- Risks related to the development of the intangible: in order to decide whether or not to take on this risk, an evaluation needs to be performed of whether the intangible potentially relates to commercially viable products, what the expected costs of the required developments are and the possibility that such development will be unsuccessful;
- Risks related to technology obsolescence and loss of intangible value: in order to decide whether or not to take on this risk, an evaluation needs to be performed of the likelihood that competitors will introduce products or services that would materially erode the market for products dependent on the intangibles being analyzed.
- Risks related to the infringement of intangible rights: in order to decide whether or not to take on this risk an evaluation needs to be performed of the likelihood that third parties may successfully infringe the rights related to the intangible being developed, and the likelihood that third parties may successfully claim that products or services based on intangibles infringe their own intangible rights, including also an evaluation of the costs from defending from such claims.
- Risks associated with product liability which may arise from the use of the intangible;

- Risks associated with the effective exploitation of the intangible, including uncertainties with respect to the returns to be generated by the intangible.

B.5.3.27.These risks are often connected to specific DAEMPE activities. The accurate delineation of the controlled transaction may determine that the legal owner assumes risks, or that, instead, other members of the group are assuming risks.

B.5.3.28. Risk control and mitigation may be performed by various entities within the group. For example, assume that risk associated with contract R&D activities performed by Company A for the benefit of Company B are properly assumed by Company B, which has the capability to determine the various stage processes together with the performance of the active decision-making function. The way the risk associated with the research and development activity assumed by Company B is mitigated may be subject to general policy-setting elsewhere in the MNE group by Company C, which sets overall levels of financing tied up in the overall R&D project across markets to meet strategic objectives. This wider policy-setting activity cannot be deemed to imply that the R&D risk is allocated to Company C. Instead, Company B assumes this risk.

B.5.3.29. Consistent with the guidance in Chapter B.2, if it is established that an associated enterprise contractually assuming the risk both controls and has the financial capacity to assume the risk associated with the DAEMPE, then the contractual allocation of risk is respected. If, on the other hand, it is established that an associated enterprise contractually assuming the risk does not control or does not have the financial capacity to assume the risk associated with the DAEMPE, then the risk should be allocated to the enterprise exercising control and having the financial capacity to assume the risk.

B.5.3.30. In this latter case, should multiple associated enterprises be identified that both exercise control and have the financial capacity to assume the risk, then the risk should be allocated to the associated enterprise or group of associated enterprises exercising most control. Other parties performing control activities should be remunerated based on their contributions to the creation of intangible value. Such compensation would depend on the arrangements between the enterprises and the importance of the control activities performed: it may be appropriate for such a party to share in the potential upside and downside consequences resulting from the outcome of the underlying risk. Alternatively the contribution might be compensated in a manner that is not contingent on the underlying risk."

Assets

B.5.3.31. According to the arm's length principle, associated enterprises contributing assets to the development or acquisition, enhancement, maintenance, protection and exploitation of an intangible should receive appropriate compensation for doing so. Such assets may include, without limitation, intangibles generally utilized in research, development or marketing activities – such as know-how, customer relationships and physical assets as well as funding.

B.5.3.32. Funding and risk taking are integrally related in the sense that funding often coincides with the taking of certain risks. For example, a decision to fund R&D in exchange for rights in the potential benefits of that R&D involves the risk that the R&D will be unsuccessful and the funding will be lost. In addition, the larger the amount of the funds provided, the larger the potential impact of the risk on the provider of the funding.

B.5.3.33. It is important to distinguish between the financial risk that is linked to the funding provided (such as, for example, the risk associated with the commitment of capital used to 'invest' in a risky intangible development opportunity) and the operational risks associated with the funded activity (such as, for example, the risk associated with the successful performance of the R&D function). Control over a financial risk requires the capability to make the relevant decisions related to the risk bearing opportunity. These include decisions related to taking on, laying off, or declining a risk bearing investment opportunity and the decisions on whether and how to respond to the risks associated with the investment opportunity.

Ex ante and ex post returns

B.5.3.34. It is important to distinguish between ex ante returns and ex post returns. Ex ante returns are anticipated or expected returns at the time a transaction is undertaken. Ex post returns refer to actual returns. There are two aspects, both of which are particularly applicable to intangibles, that are relevant to the difference between ex ante returns and ex post returns: time and risk, as discussed below.

B.5.3.35. *Time:* There is often a significant time lapse between the point in time when a transaction relating to an intangible takes place and the point in time when the actual realization of income from the exploitation of that intangible occurs. For example, a pharmaceutical company may decide in year zero to commit significant resources to undertake R&D that it anticipates will result in a marketable product in year 10. Intimately related to this temporal aspect is risk, for example if the R&D is not successful, then the company might suffer significant losses.

B.5.3.36. *Risk*: The difference between anticipated (*ex ante*) and ex post returns can arise from the materialization of a variety of risks such as risk of failure of the R&D, market risk and others. There can be a difference between what was anticipated and what actually occurred. Who should bear the consequences of risk materializing and of the difference, if any, between anticipated (*ex ante)* returns and *ex post* returns depends on the extent to which the relevant risk is assumed by the parties. The accurately delineated transaction (for example, the contractual terms, assuming they have substance) will determine which entity or entities assume such risks.

B.5.3.37. The notion that all contributions to value must be appropriately remunerated, as discussed above, is an ex ante concept.

Example: Contract R&D

B.5.3.38. *A multinational enterprise decides to invest in the development of a new product. The parent company P makes the investment decision and uses an affiliated enterprise AE which operates an R&D center to perform some R&D activities in relation to this project. The R&D process is expected to take three years between investment decision and exploitation. The intent of P is to exploit the intangible that will eventually result from the R&D process by licensing it out to third parties.*

B.5.3.39. *The contractual relationship between P and AE is a contract R&D services agreement whereby P will remunerate AE for its activities at cost + x%, whether the R&D is successful or not. P assumes the risk of failure of the R&D process. Assume that the actual delineation of the transaction is consistent with the contractual terms.*

B.5.3.40. *At the time of the decision to start the R&D activity the anticipated (ex ante) return is 100, including 60 for AE's R&D activity, including future maintenance of the developed intangible (through the cost plus service arrangement) and 40 to reward P for the performance of its DAEMPE functions and assumption of risks, taking into account the passage of time.*

B.5.3.41. *Three years later the actual (ex post) return is in fact 120, due to the materialization of an unforeseen market opportunity. The difference between ex ante and ex post return is 20, attributable to the party that assumed the market risk, in this case P. Thus, out of the actual (ex post) return of 120, 60 will be for the contract R&D activity (through the cost plus service arrangement) and 60 for the performance of DAEMPE functions by P.*

B.5.3.42. *Alternatively, if the actual (ex post) return is in fact 50, the difference between ex ante and ex post return is a negative amount of (50), due to the materialization of a market risk which was assumed by P. Thus, out of the actual (ex*

post) return of 50, 60 will still be for the contract R&D activity (through the cost plus service arrangement) and P will bear a loss of (10).

B.5.3.43. *In both cases, AE's R&D activity is appropriately remunerated and its remuneration is the same on an ex ante and an ex post basis. This is because it does not bear the consequences (whether positive or negative) of the market risk which it did not assume.*

Return to funding and associated financial risk:

B.5.3.44. Assume an entity provides funding and has the ability to control its financial investment risk.

- On an *ex ante* basis: this entity is entitled to an appropriate risk-adjusted anticipated rate of return on its investment.
- On an *ex post* basis: the actual return to that entity will depend on the terms of the accurately delineated transaction:
    - One possibility is that the funder receives a share of the difference between *ex ante* and *ex post* returns from the investment. In this way, this type of investment is equivalent to an equity investment.
    - Another alternative is that the funder receives a pre-determined return (which does not depend on the ex post results from the investment). In this way, this type of investment is equivalent to a debt investment. In practice it may be a fixed rate, or a variable rate which depends on the cost of money but not on the success of the development.

  Depending on the terms of the accurately delineated transaction, either type of investment could be consistent with the arm's length principle.

B.5.3.45. On the other hand an entity that provides funding but does not have the ability to control the financial investment risk, i.e. acting as a so-called "cash box" entity, will receive no more than a low risk-free rate of anticipated return. Consistent with the risk-free nature of this low return, the actual (ex post) return will be equal to its anticipated (ex ante) return.

Example TechCo: Joint development

B.5.3.46. *Assume that TechCo and High-Yield are members of an MNE group and decide to undertake jointly the development of an intangible, which is anticipated to*

be highly profitable based on TechCo's track record and experienced research and development staff. TechCo will perform, through its own personnel, all the functions expected to be carried out by an entity eager to acquire an independent right to exploit the resulting intangible, including the functions required to exercise control over the risk it has contractually assumed. Assume that the intangible development is expected to take seven years before being eventually successful for commercial exploitation purposes.

B.5.3.47. *Under the contractual arrangement High-Yield Co will contribute all the funding associated with the development of the intangible, which is anticipated to be an amount of 100 million per year for seven years. TechCo makes all the other contributions to the remaining DAEMPE related to the intangible, whereas High-Yield Co will control the risk associated with the funding activities amounting to an overall amount of 700 million. Once the intangible is developed, High-Yield Co will legally own the intangible, which will be licensed to unrelated parties.*

B.5.3.48. *Once developed, the intangible is anticipated to result in consolidated profits of 750 million per year, taking into account the years 8 to 17.*

B.5.3.49. *Based on the facts and circumstances of the example, High-Yield should earn a risk-adjusted rate of anticipated return based on its R&D funding commitment, which is determined to be 200 million per year (assume that this is an arm's length amount equivalent to a 14% anticipated rate of return). TechCo will earn the profit (or loss) associated with exercising control over operational risk and performing the other DAEMPE, and accordingly be entitled to the remaining anticipated (ex ante) return, or 550 million per year. Accordingly, in addition to its funding commitment of 100 million in years 1 through 7, High-Yield must pay TechCo the present-value equivalent of 550 per year (years 8-17) in recognition of the value of TechCo's DAEMPE contributions. This example does not address the actual (ex post) returns to TechCo and High-Yield Co.*

Practical guidance for fact-finding in transactions involving intangibles

B.5.3.50. The fact-finding described in paragraph B.5.3.3. above is typically performed through a review of written documents, supplemented with interviews with relevant personnel. It is suggested that the following non-compulsory steps are carried out:

- **Step 1: Request written information:** the key objective of this step is to collect as detailed information as possible as to the transfer pricing policy set at the group level, if

existing, as well as to collect documents related to key projects;

- **Step 2: Review and analyze** the documents and information collected.
- **Step 3: Conduct interviews** with relevant personnel. Typical questions refer to "Who does what in relation to the local entity's transactions", "Who sets project milestones" or "How is bonus compensation of local personnel attributed".
- **Step 4:** Analyze information gathered under Steps 1 to 3 to determine whether any inconsistency exists between the contractual risk allocation and the actual conduct of the parties which may potentially impair the accurate delineation of the underlying economic transaction.

B.5.4. Comparability

B.5.4.1. The general guidance in Chapter B.2 on comparability applies to transactions involving the use or transfer of intangibles. With respect to the comparability analysis intangibles often have unique characteristics. In conducting a comparability analysis it is therefore important to take these characteristics into account. The following features may be particularly important depending on the case at hand:

- The exclusivity (or non exclusivity) of the rights to the intangible,
- The geographic territory in which those rights may be exploited;
- The extent and duration of legal protection of the intangible and/or of the rights granted on the intangible;
- The stage of development of the intangible at the time of the transaction;
- The rights to enhancement of the intangible;

- The options realistically available to each of the parties to the transaction, taking into account the expected future economic benefits arising from it; and
- Potential other comparability factors such as local market features, location savings, assembled workforce and MNE group synergies.

B.5.5. Selection of the most appropriate transfer pricing method

B.5.5.1. The principles set out in Chapter B.3 of the Manual apply to select the most appropriate method in the circumstances of the case where the transaction involves a controlled transfer of one or a series of intangibles.

B.5.5.2.In addition, the selection of the most appropriate method in relation to an intangible transaction will depend on the type of transaction involved. For example:

- In transactions involving sales of intangibles, a CUP for the value of the transferred intangible (including the acquisition price method which is a specific application of the CUP method) or a Discounted Cash Flow approach may be appropriate. See paragraph B.5.6.8. below.
- In transactions involving rights to use intangibles, a CUP for the value of the rights to use the intangibles (e.g. value of the licence) may be appropriate. A one-sided transfer pricing method (cost plus, resale price or transactional net margin method) can be the most appropriate method if a two-sided functional analysis reveals that one party to the transaction makes all the unique and valuable contributions involved in the controlled transaction, while the other party does not make any unique contribution. In such a case the tested party should be the less complex one.
- In transactions involving the development of intangibles (e.g. through low risk contract R&D), a cost based approach (whether cost plus or cost based TNMM) may be appropriate. Specific considerations however apply to arrangements that share in the risk of development (such as cost sharing or cost contribution arrangements).

B.5.5.3. A profit split method may be the most appropriate method if each party to a transaction makes valuable, unique contributions.

B.5.5.4. The following further considerations regarding the selection of methods in transactions involving the use or transfer of intangibles can be relevant.

B.5.6. Supplemental guidance for applying methods

CUP method: acquisition price method in the case of transactions involving sales of intangibles

B.5.6.1.As regards the application of the CUP method, in some circumstances the intangibles transferred between associated enterprises were part of a recent acquisition by the MNE group from a third party. For instance, an MNE group acquires a company which owns intangibles. Further to the acquisition, it is decided to transfer the intangibles owned by the acquired company to another entity that is a member of the MNE group, in order to integrate them with other group intangibles. In such a situation, the consideration, i.e. the price, paid for the acquisition of the company from third parties may represent a useful starting point for determining the arm's length price for the controlled transaction consisting of the transfer of intangibles from the acquired company to another group member under the CUP method. This type of CUP method is sometimes referred to as an acquisition price method. See paragraphs B.5.2.29 to B.5.2.35. ***B.5.6.2.*** For instance, assume PenCo acquires for a price of 100 an equity participation in independent enterprise "Z". Z has a large R&D department developing cutting-edge technology devices but has recorded minimal sales so far. The price of 100 paid by PenCo reflects the value of the technologies developed by Z as well as the capabilities of the latter's personnel to develop further new technologies in the future. Assume that there are no other sources of value contributing to this price of 100 and that the value of tangible assets is negligible.

B.5.6.3.Immediately following the acquisition, Z transfers all its rights in the developed and partially developed technologies, including patents, trade secrets and technical know-how, to "Y", a subsidiary of PenCo. Y enters simultaneously into a contract R&D agreement with Z, whereby Z's workforce will continue to work solely on the development of the transferred technologies and on the development of new technologies on behalf of Company Y. The agreement provides that Company Z will be remunerated for its R&D services on a cost plus basis, and that all the rights to intangibles developed or enhanced under the R&D agreement will belong to company Y. Company Y will fund all future research activities and will assume the financial risk that some or all the future research will not lead to the development of successful commercial products.

B.5.6.4. As regards the transfer pricing consequences of such a restructuring, with a specific focus on the arm's length price to be paid by Company Y for the intangibles

transferred by Company Z, as well as for the price to be paid for the ongoing R&D services to be provided by Company Z, it is important to identify with specificity the intangibles transferred to Company Y and those retained by Company Z. The valuation done for purchase price allocation purposes, although important for starting the analysis, is not determinative for transfer pricing purposes.

B.5.6.5. In particular, given the above assumption that the price of 100 paid by PenCo represents the value of the technologies developed by Z as well as the capabilities of the latter's personnel to develop further new technologies in the future, such price should be reflected in the sum of

(i) the value of intangible assets transferred to Y and

(ii) the value of the intangible assets and workforce retained by Company Z.

Under the arm's length principle and depending on the facts and circumstances the CUP method may be used to determine the remuneration of Company Z paid by Company Y for

(i) the transferred intangibles; and

(ii) the present value of the remuneration paid for the R&D services rendered by Company Z.

Cost-based methods to value transfers of intangibles

B.5.6.6. The use of transfer pricing methods seeking to estimate the value of intangibles based on their cost of development is generally discouraged as the costs of developing intangibles is seldom a reflection of their value once developed. Accordingly the use of transfer pricing methods based on their cost of development should generally be avoided.

B.5.6.7. That being said, where the acquirer has the available option to produce the intangible itself or to have it produced for its own purposes, instead of acquiring it, an intangible valuation based on the estimated cost of reproducing or replacing the intangible (including the value of the time needed to re-develop the intangible rather than acquiring it) may be used.

Valuation techniques to value transfer of intangibles (Discounted Cash Flow approach, "DCF")

B.5.6.8. Where reliable comparable uncontrolled transactions cannot be identified it may be possible, under certain circumstances, to use valuation techniques to help determine the arm's length price for intangibles transferred between associated enterprises. In particular, the application of valuation techniques based on the calculation of the discounted value of projected future income streams or cash flows (DCF) derived from the exploitation of the intangible being valued, may be useful. Depending on the facts and circumstances, valuation techniques may be used by taxpayers and tax administrations as a part of one of the methods described in Chapter B.3 or as a tool that can be usefully applied in identifying an arm's length price.

Note
The discussion of DCF methods in this Section is necessarily rudimentary in nature, as a fuller exposition of the theory and practical application of this method requires a separate volume. Corporate finance textbooks provide a fairly solid grounding in this area

B.5.6.9. Some transfers of intangibles involve risks associated with the uncertainty of future results. For example, an intangible transfer could involve an early-stage patent requiring further development, or a fully-developed intangible whose future profit potential is very uncertain. These types of intangible transactions by their very nature typically don't have comparable uncontrolled transactions to directly inform the arm's length pricing of the transactions, and so a less direct method may be required. Under the DCF approach the value of an intangible is based on the *present value* of the *anticipated future income or free cash flows* attributable to the intangible property. In order to calculate the present value of the future income or cash flows the financial projections and the appropriate discounting rate must be determined.

Circumstances in which a DCF approach might be appropriate

B.5.6.10. Because a DCF is forward looking (as it is based on projected future income), it is most typically undertaken on an ex ante basis (see sections B.5.3.34 to B.5.3.49 for a discussion of ex ante versus ex post analyses). That is, a DCF calculation is typically undertaken at the time of the initial intangible transfer, and prior to the actual realization of income associated with the intangible. Since many audits are undertaken many years after the initial transfer, it is difficult to reliably apply a DCF method on an ex post basis. Accordingly, as a starting point it is

important to determine if the taxpayer has undertaken at or prior to the intangible transfer an analysis of the anticipated profitability of the intangible (i.e., financial projections), and an analysis of the anticipated risks involved. While this type of analysis is not undertaken for all intangibles, it is more likely that such an analysis may have been undertaken where the intangible is relatively important (i.e. potentially valuable) to the multinational and/or is susceptible to reasonably direct financial tracking. For example, multinationals often evaluate potential projects to develop specific intangibles, such as pharmaceutical products from a particular molecular compound, or 'next generation' software. Financial projections are sometimes used - often for non-tax reasons - in order to gauge the anticipated profitability of a project to determine its viability. These evaluations could be undertaken at any stage, or in several stages, of development. This information could be helpful in determining the arm's length value of the intangible at the time of the transfer, and accordingly be useful in determining the arm's length price for the transaction.

B.5.6.11. A DCF analysis may be undertaken by taxpayers or tax administrations at a time *subsequent* to the intangible transfer in order to inform the analysis of the value of the intangible *at the time o*f the transfer, but the reliability of this approach may be reduced. This is because, to the extent that the analysis is undertaken after risks have played out, it is difficult to assess the perception of those risks at the time of the transfer. See paragraph **B.5.6.26.**.

B.5.6.12. **Financial Projections** Financial projections [22] should reflect the best estimate of the items projected, which may include sales, development costs, cost of sales and operating expenses. Given that there is typically uncertainty in possible outcomes the financial projections may be based on a probability-weighted average of possible outcomes, as illustrated in Example B.5.1.

B.5.6.13. The length of the period for which income or cash flow is to be determined depends on the useful life of the intangible. For instance, if the discounting period is

[22] DCF methods are typically based on projections of cash flows. Accrual based measures of income may not properly reflect the timing of cash flows, which can create a difference in outcome between an income and cash flow based approach. However, the use of income projections rather than cash flow projections may, in some cases, yield a more reliable result in a transfer pricing context as a practical matter. Care must be taken, however, to ensure that either income or cash flow measures are applied in a consistent manner and in appropriate circumstances. References to cash flow in this document should therefore be read broadly to include both cash flow and income measures, appropriately applied.

ten years, then the income or cash flow projections should also be determined for a ten year period. The useful life of an intangible is the entire period during which the exploitation of the property is anticipated to occur. Exploitation of intangibles includes any direct or indirect use or transfer of the intangible property, including use without further development, use in the further development of the intangible (and any exploitation of the further-developed intangible), and use in the development of other intangibles (and any exploitation of the other intangibles when they are developed).

B.5.6.14. Example B.5.1: Assume that a project is undertaken in order to develop a genetically modified grass for livestock grazing. The project will involve R&D undertaken for two years. If the R&D is successful, then the intangible will be exploited in years three through five, after which the intangible is anticipated to be worth nothing due to anticipated competitive pressures. While the future R&D expense is fairly certain, the outcome of the R&D is less certain, so the financial projections for sales are uncertain. Accordingly, the taxpayer prepares three sets of sales projections associated with an optimistic outcome, an expected outcome, and a pessimistic outcome. The taxpayer estimates that the expected outcome is most likely to occur, and that both the optimistic scenario and the pessimistic scenario are less likely. Accordingly, based on its technical and business judgment, the taxpayer assigns a 50 percent probability of sales achieving the expected outcome, a 25% probability of sales achieving the optimistic outcome, and a 25% probability of sales achieving the pessimistic outcome. Assume further that production costs are estimated to be equal to 40 percent of sales and operating expenses are estimated to be equal to 20 percent of sales. The taxpayer determines the most reliable financial projections by performing a probability-weighted calculation as follows:

Table 1: Expected Scenario, 50% probability of occurring

Year		**1**	**2**	**3**	**4**	**5**	
Sales				250	250	250	
R&D		100	100				
COGS				100	100	100	
Operating Expenses				50	50	50	

(SGA)							
Operating Income		(100)	(100)	100	100	100	

Table 2: Optimistic Scenario, 25% probability of occurring							
Year		**1**	**2**	**3**	**4**	**5**	
Sales				750	750	750	
R&D		100	100				
COGS				300	300	300	
Operating Expenses (SGA)				150	150	150	
Operating Income		(100)	(100)	300	300	300	

Table 3: Pessimistic Scenario, 25% probability of occurring							
Year		**1**	**2**	**3**	**4**	**5**	
Sales				0	0	0	
R&D		100	100				
COGS				0	0	0	
Operating Expenses (SGA)				0	0	0	

Operating Income		(100)	(100)	0	0	0	

Table 4 PROBABILITY-WEIGHTED FINANCIAL PROJECTIONS **([Table 1 times 50%] PLUS [Table 2 times 25%] PLUS [Table 3 times 25%])**							
Year		**1**	**2**	**3**	**4**	**5**	
Sales				312	312	312	
R&D		100	100				
COGS				125	125	125	
Operating Expenses (SGA)				62	62	62	
Operating Income		**(100)**	**(100)**	**125**	**125**	**125**	

Discount rate

B.5.6.15. A Discount rate is used to convert the projected future year results to an equivalent present value. The discount rate is supposed to compensate for the time and risk associated with the projected income or cash flows. A discount rate should be used that most reliably reflects the market-correlated risks of the projected income or cash flows, providing a measure of the appropriate anticipated return to the risk undertaken. For example, if a particular income or cash flow is projected to occur with complete certainty, the discount rate should only take into account the time required to receive such income or cash flows. In this case, a risk-free rate might provide the most reliable discount rate e.g. long term government bond rates for the time value of money invested. On the other hand, if the projected income or cash flows are highly uncertain due to risk, those risks should be taken into account when

determining the applicable discount rate. In such situations, the discounting rate might be calculated based on a higher rate than the risk-free rate, to adjust for risk premium.

Technical Note : Ex ante versus ex post financial projections;

Ex post financial projections are, of course, not really projections at all, but the *actual* financial results. Assume, for example, that the actual results of the project in example 5.1 turn out to be what was considered the optimistic scenario at the outset of the project, reflected in Table 2. From the ex post perspective of year 5 there is no risk, there is only the certainty of what actually happened. If these financial results are used in a DCF model to determine the value of the intangible at the beginning of the project in year 1, there are two potential biases introduced with respect to risk. First, using actual financials effectively presumes that they correspond to anticipated financial projections as of year 1 *with perfect certainty*. That is, using these financials does not capture any of the real uncertainty of the project at its outset. Second, there is the question of what discount rate should be applied to the financial projections. Should it be the risk-free rate, reflecting the certainty of the actual outcomes ? It would seem not, as this would certainly exacerbate the risk bias. In short, since risk is a key element in determining the value of the development of an intangible, assessment of such risk after the fact is difficult and inherently subjective, as it is difficult to « discount » the risk of what *actually* happened. As an illustration of this concept, what is the amount that someone should have paid yesterday for a lottery ticket number that happens to win $580 million today ? The answer is the price of the lottery ticket (e.g. $1). While a person might understandably assess that the ticket was worth more yesterday (after all, it *turned out* to be the winning ticket), this would reflect ex post risk bias.

It is important to note that an entirely different question is whether the financial projections and assessment of risk undertaken by a taxpayer are in fact truly reliable, or whether they might reflect opportunistic use of information assymetry over the tax authority, such as through deliberate undervaluation of the financial projections or a deliberate overestimate of the anticipated risk. In those narrow situations, it might be appropriate to use actual financials to value intangibles. See paragraph B.5.6.26.. As an illustration, if a person was 'tipped off' that a certain lottery ticket number would be picked tomorrow, he would certainly be willing to pay more – much more - than $1 for that lottery number today !

Other aspects of DCF methods

B.5.6.16. Where the purpose of the valuation technique is to isolate the projected cash flows associated with an intangible, it may be necessary to evaluate and quantify the effect of projected future income taxes on the financial projections. Tax

effects to be considered include: (i) taxes projected to be imposed on future cash flows, (ii) tax amortisation benefits projected to be available to the transferee, if any, and (iii) taxes projected to be imposed on the transferor as a result of the transfer, if any.

B.5.6.17. Applications of DCF approaches require the determination of realistic and reliable financial projections, growth rates, discount rates, the useful life of the intangibles and the tax effects of the transaction. In some circumstances, where intangibles contribute to continuing cash flows beyond the period for which reasonable financial projections exist, a "terminal value" for the intangible-related income or cash flows may be calculated. Where terminal values are used the assumptions underlying their calculation should be clearly documented, particularly the assumed growth rates. It is important to note that a small change to one or more of the valuation parameters above can lead to huge differences in the valuation results. Therefore it is crucial to require taxpayers to clearly state their presumptions regarding the important parameters, and, when needed, make some sensitivity analysis which presents the consequential change of valuation results of using alternative presumptions.

Technical Note : Terminal value

Financial forecasting is difficult, and forecasts tend to become less reliable and more cumbersome the longer the projection period. It is not necessary to estimate financial projections forever. After providing financial projections for a number of years, a "terminal value" can be used at the point of time in which the analyst expects stable growth rates. For example, if year-by-year financial projections are estimated out to year 10, then a terminal value in year 11 is discounted at the appropriate rate - that is, divided by $(1+d)^{11}$, where d is the discount rate, to determine the present value of the terminal value. The terminal value is defined by the financial projection for an item (e.g., net income) for year 11 divided by (d-g), where g is the assumed growth rate of the item. The present value of the terminal value is added to the present value of the projections through year 10.

Terminal values are mathematically equivalent to the financial projections continuing in perpetuity. While this may seem at first sight to unrealistically overvalue intangibles (after all, it seems quite unlikely that intangibles will have value *forever*), terminal values are actually a useful shorthand when detailed out-year financial projections become unreliable, and two aspects of terminal values should be kept in mind. First, the terminal value *itself* is discounted, and the further out in years the terminal value is estimated, the more significant is this factor. For example, at a discount rate of 10 percent, the discount factor in year zero of a terminal amount of $100 in year 10 is $1/(1.1)^{10}$, or $38.6. Second, things such as anticipated obsolescence, anticipated future competitive pressures, and other aspects reflecting the anticipated diminution of value over time of an intangible can be reflected in g, the growth factor. A negative value of g, for example, can be used to reflect the expectation that competitive pressure will eventually and permanently reduce the anticipated profitability of the intangible.

B.5.6.18. Furthermore, it is necessary to take into account the present value calculated from the perspective of both parties to the controlled transactions. The arm's length price should fall within the range of expectations of the two parties.

B.5.6.19. Example B.5.2. Assume that the facts are the same as example 5.1. Assume further that:

- Company A sells the entire rights to the (potential) genetically modified seeds to Company B prior to the commencement of the R&D project, and Company B will fund the development activities. Assume that Company B has the ability to control and the financial capacity to undertake such financial investment risk

- the R&D will be performed by Company A in country A, and the intangible will solely be exploited in Country B;

- Company A is uniquely qualified to undertake the R&D because of its highly skilled workforce, and its use of valuable pre-existing intangibles related to other genetically modified seed patents that it owns;

- Company B will produce and sell the seeds. Assume that the arm's length remuneration for this activity is a 5.3 percent mark-up on total costs (CGS + SGA);

- Through the functional analysis it is determined that Company A has the realistic alternative of developing the intangible itself (that is, retaining the rights to the intangible) and exploiting it in Country B. Assume further that Company B has the ability to control its investment risk;

- It is determined that the appropriate discount rate, which reflects the market correlated risks associated with the project, is 11 percent. This is determined with reference to the weighted average cost of capital of unrelated companies that engage in similarly risky projects;

B.5.6.20. Under these assumptions, Company A would not surrender its rights to the intangible for an amount that would make it worse off compared to its realistic alternatives. This would be reflected in the table below:

Table 5						
Year	**Present Value at 11% Disc. Rt.**	**1**	**2**	**3**	**4**	**5**
Sales				312	312	312
R&D		100	100			
COGS				125	125	125
Operating Expenses (SGA)				62	62	62
Operating Income	**77**	(100)	(100)	125	125	125
Arm's length return to mfg and sales	**24**	0	0	10	10	10
Operating Income attributable to intangibles	**53**	(100)	(100)	115	115	115

B.5.6.21. The present value of operating income, discounted at an eleven percent rate, is 77. However, of that amount, the present value of the assumed arm's length return to manufacturing and selling, undertaken by Company B, is 24. Under these assumptions, Company A would not surrender the rights to the intangible for less than an amount equal in present value to 53.

Technical Note – simplifying assumptions

There are a number of important simplifying assumptions made for the purpose of the example.
-- First, for example, discount rates are typically determined on an after-tax basis, and should typically be used to

discount after-tax income flows. In the example, the discount rate is used to discount pre-tax cash flows. This is not generally appropriate, although it may be appropriate in particular circumstances.
-- Second, for ease of calculation all financial flows are assumed to occur at the end of each period.
-- Third, the financial projections are assumed to end at the end of year 5. Often financial projections extend beyond the years explicitly documented through the use of tools such as terminal value calculations.

B.5.6.22. It is important to consider the assumptions and motivations that underlie particular applications of DCF approaches. For example, some valuation assumptions may reflect conservative assumptions and estimates of the value of assets reflected in a company's balance sheet. This inherent conservatism can lead to definitions that are too narrow for transfer pricing purposes and valuation approaches that are not necessarily consistent with the arm's length principle. Caution should be exercised in accepting valuations performed for accounting purposes as necessarily reflecting arm's length prices or values for transfer pricing purposes without a thorough examination of the underlying assumptions. In particular, valuations of intangibles contained in PPAs performed for accounting purposes are not determinative for transfer pricing purposes and should be used with caution and careful consideration of the underlying assumptions.

Use of DCF methods by tax administrations

B.5.6.23. Because DCF methods are properly undertaken on an ex ante basis, and because tax audits typically occur at a later time, it is often the case that tax administrations must rely at least partially on the taxpayer's initial DCF analysis in evaluating the arm's length nature of a transaction involving intangibles. A relevant question is how such information can be used by tax administrations, and how this information might be supplemented as part of a fact-finding exercise.

B.5.6.24. As discussed in paragraph ***B.5.6.10.***, one of the characteristics making the application of a DCF analysis plausible in the first place is that the intangible is susceptible to reasonably direct financial tracking. If this characteristic applies to financial projections, it is also likely to apply to the *actual* financial results from the intangible (that is, to ex post results). With this information, tax administrators should be able to compare anticipated profitability with actual profitability. It is important to note that there will inevitably be discrepancies between anticipated results and actual results, because after all, risk and uncertainty are real. However, the information can be used to assist in fact finding, raising questions that tax administrations may raise with taxpayers, such as:

- How do the actual results compare to the anticipated results? Are the actual results within or outside the anticipated range of potential results (e.g., the different forecasts in the probability-weighted financial projections in example 5.1)? What explains the divergence?

- What is the company's track record with respect to other relevant capital budgeting decisions (i.e. application of ex ante DCFs done for other intangibles)? Does the company tend to systematically outperform or underperform its estimates of anticipated profitability?

- On what basis was the initial assessment of risk undertaken, both with respect to the probability-weighted financial projections and the determination of an appropriate discount rate? Is there documentation prepared at the time of the initial assessment?

- Is the discrepancy between anticipated results and actual results likely to continue in subsequent years (that is, years beyond the audit year)? Is so why or if it is not likely to continue why not?

- Have there been unanticipated events subsequent to the initial transaction that wholly or partially explain the discrepancy?

B.5.6.25. These questions may assist the tax administration in determining whether the ex ante analysis undertaken by the taxpayer truly reflected an appropriate assessment of the anticipated profitability and risk associated with the intangible. It is important to stress that it is generally inappropriate for a taxpayer or tax authority to undertake a DCF analysis based on ex post data in order to formulate an assessment of the ex ante value of an intangible. This is because it is difficult and often subjective to determine the ex ante view of risks after the risks have already materialized. Such an analysis may constitute an inappropriate use of hindsight.

B.5.6.26. However, there are situations in which, for transactions involving intangibles whose valuation is highly uncertain at the time of the transaction, and that are susceptible to opportunistic use of information asymmetry between the taxpayer and the tax administration, ex post outcomes can provide a pointer to tax administrations as to the arm's length nature of the ex ante pricing arrangement agreed upon by the associated enterprises, and the nature of uncertainties at the time of the transaction. Section D.4 of Chapter VI of the OECD Transfer Pricing Guidelines discusses these situations (paragraphs 6.186 – 6.195), and the discussion and conclusions of that Section are fully endorsed by this Manual.

Other applications of DCF – using DCF to set ex ante contingent payments

B.5.6.27. A DCF can be used to determine on an ex ante basis an arm's length contingent payment (e.g. royalty on anticipated sales), which is then applied to the actual contingent payment base (e.g. the same royalty rate on actual sales). As with all methods, the application of this approach is subject to the most appropriate method rule. However, in the event that more direct comparables (e.g. comparable unrelated license rates) are not available, a less direct measure based on the anticipated profitability of the intangible might be used.

B.5.6.28. Example B.5.3. Assume that the facts are the same as in example 5.2. However, Company B agrees to compensate Company A on a contingent basis, based on sales. Based on the results in Table 5, a royalty rate of 36.9 percent on anticipated sales will result in a present value of 53 to Company A. That is, a royalty rate of 36.9 percent applied to anticipated sales of 312 in each of years 3, 4, and 5 yields 115 in each of years 3, 4, and 5. Taking into account the 100 in R&D costs undertaken by A in years 1 and 2, the present value of this income stream is 53. Accordingly, the arm's length royalty rate is determined to be 36.9 percent, and this rate is applied to actual sales (which may differ from anticipated sales).

Conclusion on valuation techniques

B.5.6.29. It is not the intention of this manual to set out a comprehensive summary of the valuation techniques used by valuation professionals. Similarly, it is not the intention of the Manual to endorse or reject one or more sets of valuation standards used by valuation or accounting professionals or to describe in detail or endorse one or more specific valuation techniques or methods as being especially suitable for use in a transfer pricing analysis. However, where valuation techniques are applied in a manner that gives due regard to this Manual, to the specific facts of the case, to sound valuation principles and practices, and with appropriate consideration of the validity of the assumptions underlying the valuation and the consistency of those assumptions with the arm's length principle, such techniques can be useful tools in a transfer pricing analysis.

Profit split method

B.5.6.30. In some circumstances a transactional profit split method can be utilized to determine the arm's length conditions for a transfer of intangibles or rights in intangibles. See Section **B.3.3.13.**of Chapter B.3 of this Manual. In determining

whether a transactional profit split method should be selected as the most appropriate to the transaction, the availability of reliable and sufficient data regarding combined profits from the transaction and factors to be used to divide them should be taken into account as this can affect the reliability of the method.

B.5.6.31. Where a profit split method is found to be the most appropriate method in a transaction involving the transfer of an intangible or rights in an intangible, the following main questions need to be addressed :

(i) Determination of the combined profits from the transaction that will be split. This may require segmenting the parties' profit and loss accounts to focus on the results of the transaction only.

(ii) Whether the split will be based on expected (ex ante) or actual (ex post) profits. The profit split approach selected must consider which party(ies) assume(s) the risks that actual (ex post) results may differ from anticipated (ex ante) profits.

(iii) Determination of appropriate splitting factor(s). This should depend on the expected contributions by each party to the transaction.

B.5.6.32. Notwithstanding the above, the transfer pricing methods most likely to prove useful in transactions involving the use or transfer of one or more intangibles are the CUP and the transactional profit split method. Valuation techniques can be useful tools to supplement the application of the above mentioned method as described in Section XXX below.

B.5.6.33. Where information regarding reliable comparable uncontrolled transactions cannot be identified the arm's length principle requires the use of another method to determine the price that uncontrolled parties would have agreed under comparable circumstances. In such a situation, it is important to consider the following factors:

- The functions, assets and risks of the respective parties to the transaction;
- The underlying business reasons for engaging in the transaction;
- The options realistically available to each of the parties to the transaction, including the expected future economic benefits arising from it;

- The value-adding elements embedded in the intangibles, with a specific focus on the relative profitability of the products or services to which the intangibles relate; and
- Other comparability factors such as local market features, location savings, assembled workforce and MNE group synergies.