

The Profit-Split Method: A Commentary on the Nulon Example

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In this third article of the series on the profit-split method (PSM), Sanschagrín and Schwerdt explain the Nulon example provided by the U.S. Treasury regulations, which illustrates the general approach of the IRS in applying the residual profit-split method.

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The "Nulon example" provided in reg. section 1.482-6(c)(3)(iii)(i)-(viii) is the sole example provided in the U.S. regs to illustrate the application of the residual profit-split method (RPSM). The Nulon example allocates the net pre-royalty operating profit between a U.S. parent company, XYZ, and its European subsidiary, XYZ-Europe. This article explains the example's application of the RPSM and provides practical considerations. The steps discussed in the Nulon example address the factors contributing to RPSM as the best method, distinguish between routine

and key value-driver functions,¹ and determine the economic ownership of intangible property among entities.

Given the increasing significance of global intangible property and the OECD's base erosion and profit-shifting initiative (BEPS),² we predict that the RPSM will become the preferred method for the IRS and other tax authorities to examine the arm's-length nature of controlled transactions within complex value chains, and to implement transfer pricing adjustments for claiming their share of income tax. This increases the importance of having a complete and accurate understanding of how the IRS expects taxpayers to apply the RPSM.

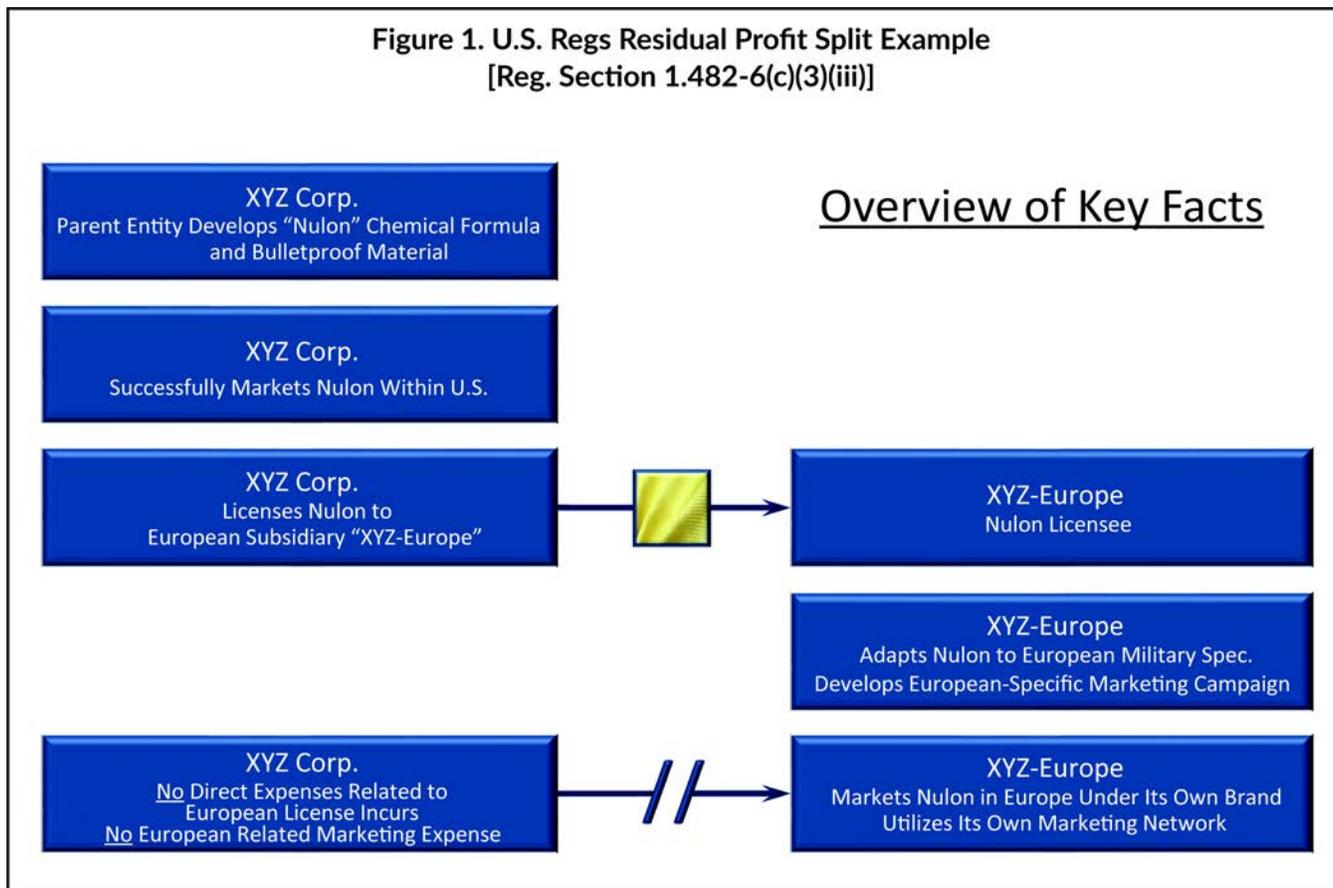
Background

XYZ is a U.S. corporation specializing in developing, manufacturing, and marketing products for law enforcement use across the United States. XYZ created a bulletproof material for protective clothing and headgear (Nulon) and secured patent protection for its chemical composition. Since its launch, Nulon has captured a significant portion of the U.S. market for bulletproof material.

XYZ granted its subsidiary, XYZ-Europe, a license to manufacture and market Nulon in Europe. The research unit at XYZ-Europe adapted Nulon to meet military specifications and launched a high-intensity marketing campaign that targeted the defense industry in various European countries. XYZ had no direct expenses related to the license of Nulon to XYZ-Europe and incurred no XYZ-Europe Nulon marketing expenses. XYZ-Europe manufactured and sold

¹Intangible development activities as defined in the U.S. regs are frequently considered examples of key value-driver functions.

²OECD, Inclusive Framework on Base Erosion and Profit Shifting (Last accessed June 26, 2023).



Nulon in Europe through its marketing network and under one of its brand names. Figure 1 provides an overview of this example’s key facts.

XYZ-Europe’s sales quickly reached \$500 million, and pre-royalty expenses amounted to \$300 million. Consequently, the net pre-royalty operating profit was \$200 million.

The district director concluded that the RPSM would provide the most accurate measure of an arm’s-length result.³ Although not explained explicitly in the Nulon example, the district director seemingly selected the RPSM as the best method because both XYZ and XYZ-Europe performed high-value functions that contributed to Nulon’s technology and marketing intangible property. XYZ is not entitled to the returns associated with the technology and marketing of

intangible property created by XYZ-Europe or the risks associated with these investments. However, XYZ maintains ownership of the Nulon U.S. patent and the technology it licensed to XYZ Europe, on which XYZ-Europe’s Nulon intangible property was based.

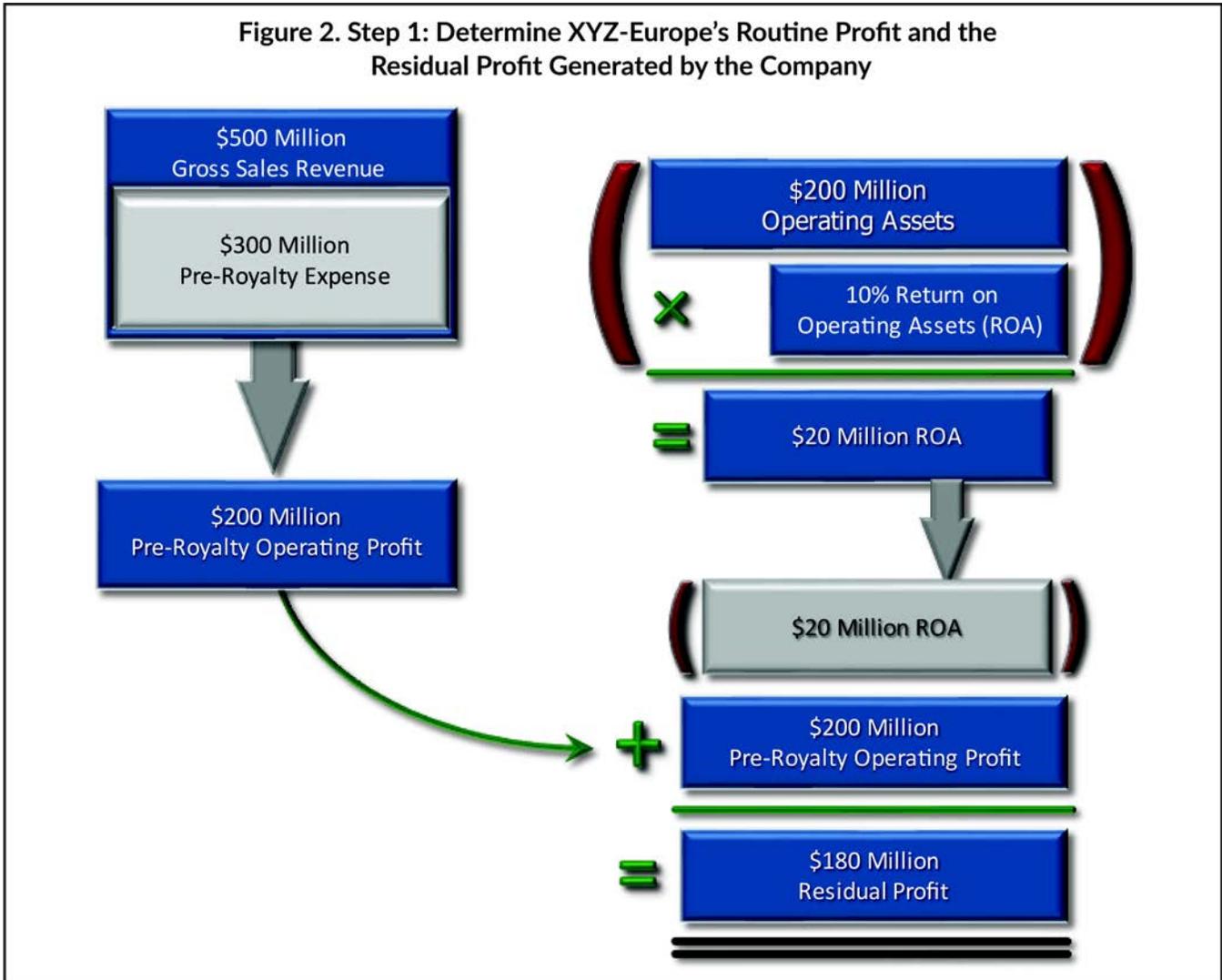
Below we describe how the IRS applied the RPSM in the Nulon example to determine the arm’s-length split of the \$200 million pre-royalty operating profit between XYZ and XYZ-Europe.

Step 1: Allocate Operating Profit

The first step in applying the RPSM is to allocate returns to routine contributions. These are contributions of the same kind (or similar) to those made by uncontrolled taxpayers involved in similar business activities for which it is possible to identify market returns. Reg. section 1.482-6(c)(3)(i)(A) states, “Routine contributions ordinarily include contributions of tangible property, services, and intangible property that are generally owned by uncontrolled taxpayers

³For a discussion on evaluating whether the profit-split method is the best method, see Guy Sanschagrin and Doug Schwerdt, “Introducing the Profit-Split Method: To Apply or Not to Apply, This Is a BEPS Question,” *Tax Notes Int’l*, Mar. 27, 2023, p. 1803.

Figure 2. Step 1: Determine XYZ-Europe's Routine Profit and the Residual Profit Generated by the Company



engaged in similar activities."By contrast, nonroutine contributions are much more specific to the individual taxpayer being analyzed and are often associated with unique and valuable proprietary intangible property.

The district director established that the average market return on XYZ-Europe's operating assets was 10 percent, "based on an examination of a sample of European companies performing functions similar to those of XYZ-Europe."⁴ They did not address separate routine returns for sales and distribution activities. Thus, we assume the operating assets include sales and distribution assets and that the

10 percent return applies to both manufacturing and sales as well as distribution functions. Applying the average market return to XYZ-Europe's \$200 million value of operating assets resulted in a "routine" return of \$20 million (10 percent multiplied by the \$200 million value of operating assets). The Nulon example does not indicate what the value of the operating assets is based on, but we presume the book value was used. Still, it may be appropriate to use fair market value because of the potential distortion that accounting methods like depreciation⁵ may create, resulting in a book value that may not

⁴Reg. section 1.482-6(c)(3)(iii)(iv).

⁵Depreciation is an accounting technique used to periodically lower the book value of an asset over the asset's economic useful life.

reflect the actual economic value of the operating assets.

XYZ-Europe is the sole recipient of routine returns because the district director did not identify routine contributions by XYZ to XYZ-Europe's business. This is probably because XYZ did not perform any manufacturing, services, or sales-related functions related to the European market. Subtracting the \$20 million routine return from the \$200 million pre-royalty operating profit yields a remaining residual profit of \$180 million. Figure 2 illustrates Step 1.

Step 2: Allocate Residual Profit

The district director determined that the residual profit of \$180 million is attributable to the intangible property associated with XYZ-Europe's "Nulon Military"⁶ business, specifically the Nulon technology (inclusive of XYZ-Europe's modifications) and the high-intensity European marketing campaign. Therefore, the next step was to allocate the \$180 million residual profit based on each party's relative contribution to the intangible property connected to the Nulon Military business. The district director determined the economic ownership share of intangible property by establishing a ratio of the capitalized value of Nulon-related research and development and marketing expenditures⁷ over the Nulon-related sales per entity.⁸ For XYZ, this was based on its worldwide product sales because XYZ's R&D expenses supported the worldwide protective product sales of the XYZ Group. XYZ-Europe's ownership share was based on its Nulon Military sales in Europe because its R&D and high-intensity marketing expenditures support only XYZ-Europe's sales in the European market.

The Nulon example does not describe calculating the capitalized and amortized value of investments. The amortization of the value of

investments in R&D and marketing would likely be based on the actual economic remaining useful life of the subject Nulon Military technology and marketing intangible property. A close examination may determine that including amortization is inappropriate in determining XYZ-Europe's Nulon Military operating income. The subject Nulon Military technology and high-intensity marketing intangible property are new, and there is no evidence of technology obsolescence or reduction in marketing effectiveness or product/brand awareness. Moreover, this analysis should consider the time value of money because investments made in prior years have a higher cost than those made in today's dollars. Therefore, analysts should consider using valuation techniques to determine the present value of prior-year investments.

Notwithstanding the issues identified above, the district director determined that the value of XYZ's Nulon R&D expenditures was \$0.20 per dollar (or 20 percent) of global protective product sales. Similarly, the district director examined XYZ-Europe's Nulon R&D and high-intensity marketing investments and determined that the value was \$0.40 per dollar (or 40 percent) of XYZ-Europe's Nulon Military sales.

Therefore, the Nulon Group's investment in Nulon Military intangible property was \$0.60 per dollar of sales, comprising XYZ-Europe's contribution of \$0.40 per dollar of its Nulon Military sales and XYZ's contribution of \$0.20 per dollar of its global sales. Accordingly, the district director used these figures to calculate the relative contribution of each party:

XYZ's relative contribution to
Nulon Military intangible property =
 $(\$0.20 / \$0.60) = (1/3)$

XYZ-Europe's relative contribution to
Nulon Military intangible property =
 $(\$0.40 / \$0.60) = (2/3)$

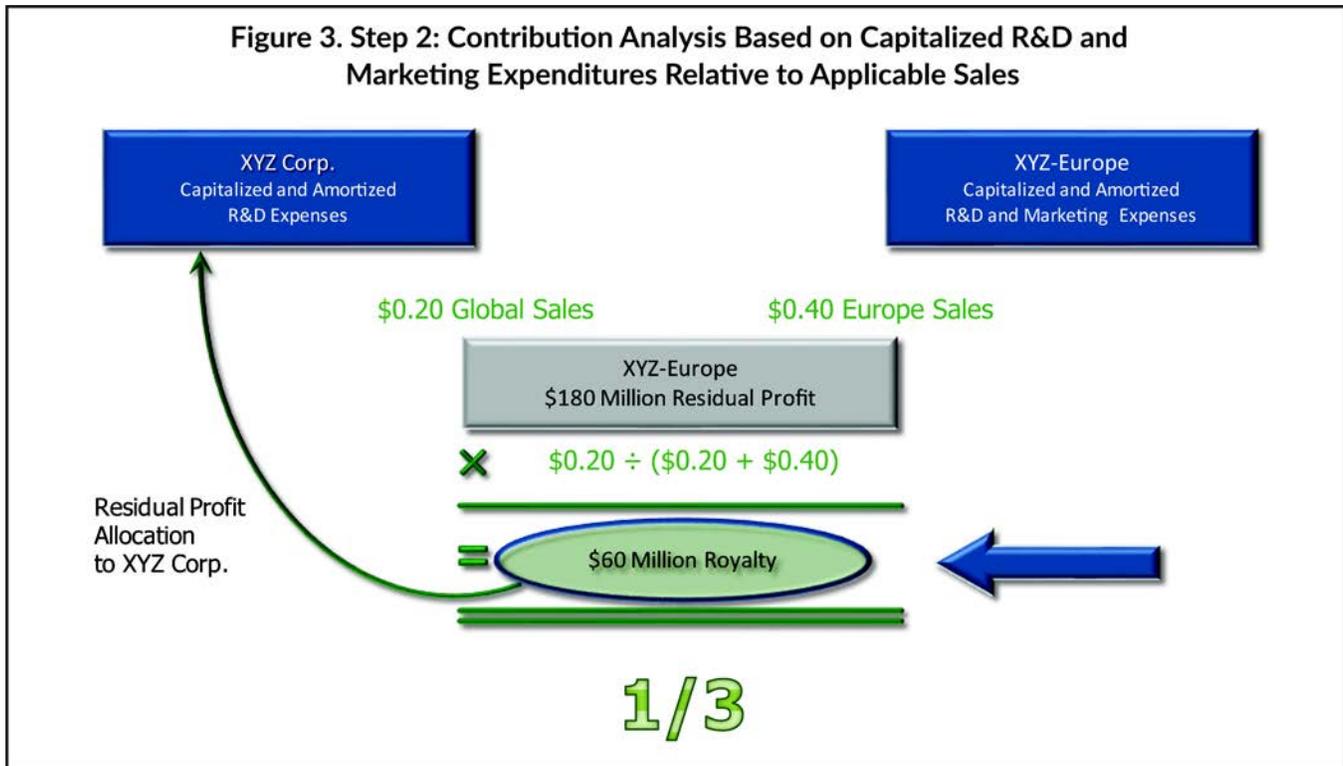
Using this approach, the district director determined that XYZ-Europe owned two-thirds of the value of Nulon Military intangible property, while XYZ owned the remaining one-third because of its development and ownership of base Nulon technology intangible property. The district director then used these ownership proportions to split the residual profit of \$180 million:

⁶We use the term "Nulon Military" to describe XYZ-Europe's adapted Nulon products and to differentiate them from the patented chemical formula of Nulon and XYZ's Nulon products for the U.S. police market.

⁷The Nulon example refers to capitalization over the "average useful life" of investments in protective product R&D and marketing but does not further detail what that is.

⁸The numerator and denominator values are for the 1995 taxable year.

Figure 3. Step 2: Contribution Analysis Based on Capitalized R&D and Marketing Expenditures Relative to Applicable Sales



XYZ's share of residual profit =
 $(1/3) * \$180 \text{ million} = \60 million

XYZ-Europe's share of residual profit =
 $(2/3) * \$180 \text{ million} = \120 million

The arm's-length royalty payment from XYZ-Europe to XYZ was \$60 million. The arm's-length royalty rate as a percentage of XYZ-Europe's Nulon Military sales is 12 percent.⁹ Figure 3 illustrates Step 2.

Additional Commentary

'High-Intensity' Marketing and Value Creation

The "high-intensity" label assigned to XYZ-Europe's marketing campaign bears significance. It suggests valuable nonroutine contributions, which are pivotal for dividing residual profit under the RPSM. The Nulon example does not specify XYZ-Europe's marketing functions, but the term "high-intensity" suggests they included robust marketing strategies that resulted in uniquely

effective product positioning, market intelligence, and market penetration. The vigorous nature of the campaign presumably generated significant marketing intangible property in the form of an enhanced brand image and strong product identity. It's also likely that XYZ-Europe assumed substantial risks related to market acceptance and regulatory compliance. The assumption of these risks underlines the entity's crucial role in value creation.

Profit-Split Factors and Value Creation

Naturally, the profit-split factors play a central role in the RPSM because they are the metric through which residual profit is divided among related entities, and they are integral to reliably representing the nonroutine contributions of each party. The district director's selection of capitalized and amortized R&D and marketing costs as a percentage of sales as the method for the residual profit-split factor underscores the transfer pricing principle of aligning profit allocation with underlying economic activity. This approach implicitly acknowledges that value creation is intrinsically tied to each entity's intangible property-generating activities, which

⁹ Arm's-length royalty = \$60 million / \$500 million = 12 percent of sales.

directly drives sales for XYZ-Europe. Thus, XYZ's investment in original Nulon R&D and XYZ-Europe's R&D to adapt Nulon for use in European military products and its execution of a high-intensity marketing campaign all highly contribute to XYZ-Europe's Nulon Military sales.

The district director may have considered other profit-split factors because capital expenditure reflects asset investment but may not always correlate directly with value creation. Headcount might indicate resource commitment, yet it may oversimplify the underlying economics and lead to an inappropriate profit allocation because of unrealistic presumptions of equal productivity across employees and labor as the primary value driver. Time spent on R&D and high-intensity marketing as a profit-split factor has similar limitations. These profit-split factors may not correlate well with intangible property valued for innovation, brand, or market position. Moreover, a profit-split factor must be feasible to implement based on the availability and reliability of multinational enterprise internal data. The profit-split factor should reflect the underlying economic reality and value creation processes, ensuring an economically justifiable profit allocation across entities in accordance with the arm's-length standard.

Conclusion

The Nulon example illustrates an approach to applying the RPSM. The district director's RPSM analysis aims to determine the arm's-length royalty payable by XYZ-Europe to XYZ for the right to use the patented Nulon chemical formula in its adapted personal protection products for the European military market. XYZ and XYZ-Europe each owned a substantial share of the Nulon

Military intangible property. When the RPSM is the best method, MNEs need to identify the costs and timing of associated investments and evaluate the useful life of intangible property. Transfer pricing analysts can use valuation techniques to consider these factors in calculating the capitalized value of prior-year investments.

Many MNEs avoid the RPSM because of additional complexity and uncertainty compared with "one-sided" transfer pricing methods. MNEs are also concerned that tax authorities will use transparency on the allocation of profits across the MNEs' entities against them. However, as the role of MNEs' global intangible property grows and the OECD's BEPS initiative continues to expand, we anticipate more tax authorities will view the RPSM as the method of choice to pursue transfer pricing adjustments in their quest to claim their share of taxable income. Thus, it behooves MNEs with intangible property dispersed among their value chains to understand how the RPSM would be applied when facing this controversy.

The RPSM analysis in the Nulon example demonstrates the method's flexibility and suitability for complex transfer pricing scenarios involving intangible property. As U.S.-based MNEs move forward, they can use the analysis as a helpful guide to applying the RPSM from the perspective of the IRS while considering the guidance and legislation provided by the OECD¹⁰ and relevant countries. In a later article, we will provide commentary on the RPSM examples in the OECD guidelines. ■

¹⁰ See Sanschagrín and Schwerdt, "The Profit-Split Method: A Comparison of U.S. and OECD Guidance," *Tax Notes Int'l*, Apr. 24, 2023, p. 489.