MANUAL TRANSMITTAL

Department of the Treasury
Internal Revenue Service

SEPTEMBER 22, 2020

EFFECTIVE DATE

(09-22-2020)

PURPOSE

(1) This transmits revised IRM 4.48.5, Engineering Specialty, Intangible Property Valuation Guidelines.

BACKGROUND

(1) This material is the product of the Engineering and Appraiser IRM update team that was established to assist IRS leadership in setting direction for valuation policy that cuts across functional lines, and in identifying process improvements to improve compliance and better utilize resources.

(2) This document provides specific instructions to examiners on:

a. Planning the valuation assignment
b. Analyzing relevant information
c. Preparing work papers
d. Reviewing and critiquing a third-party valuation

MATERIAL CHANGES

(1) Rewrote IRM 4.48.5.1 to include internal control information at the beginning of the IRM.

a. Changed title to Program Scope and Objectives.
b. Added new paragraphs (2) and (3) to describe audience, policy owner and program owner.
c. Added new sub-sections IRM 4.48.5.1.1 through IRM 4.48.5.1.5 to include “Background,” “Authority,” “Roles and Responsibilities,” “Program Objectives and Review,” and “Related Resources.”

(2) Other significant changes are summarized in the following table:

IRM Cite	Title	Description
4.48.5	Throughout	Changed the term “valuator” to “appraiser”
4.48.5.1.5	Related Resources	Added link to Engineering website here and throughout.
4.48.5.2.1	Planning	Added reference and link to engineering resources
4.48.5.2.3	Documenting	Changed title to “Defining and Documenting”
4.48.5.2.4	Analyzing	Added additional items to consider.
4.48.5.2.5	Workpapers	Added reference to IRM 4.48.1.4, Workpapers
4.48.5.3	Resolution Guidelines	Clarified the appraiser’s role and added penalty consideration requirement
4.48.5.4	Reporting Guidelines	Added reference to IRM 4.48.1.1.3.4, Role of the Engineering Manager
4.48.5.4.3	Statement	Added three new bullet items

(3) Editorial changes made throughout.

EFFECT ON OTHER DOCUMENTS

IRM 4.48.5 dated July 01, 2006 is superseded.

AUDIENCE

All IRS employees who provide valuation services or review the valuations and appraisals prepared by others.

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4.48.5
Intangible Property Valuation Guidelines

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4.48.5.1 (09-22-2020) Program Scope and Objectives

(1) **Purpose**: The purpose of this IRM is to provide guidelines applicable to all IRS personnel who are engaged in valuation practice (hereinafter referred to as appraisers) relating to the development, resolution and reporting of issues involving intangible property valuations and similar valuation issues. Appraisers must be able to reasonably justify and document any departure from these guidelines.

(2) **Audience**: IRS employees who provide valuation services, review the valuations and appraisals prepared by others, or request such services.

(3) **Policy Owner**: Director, Eastern Compliance Practice Area.

(4) **Program Owner**: Director of Field Operations (DFO), Engineering.

4.48.5.1.1 (09-22-2020) Background

(1) For purposes of this document, intangible property includes, but is not limited to, any commercially transferable interest in any items included in the following seven categories:

- Computer software
- Patents, inventions, formulae, processes, designs, patterns, trade secrets, or know-how
- Copyrights and literary, musical, or artistic compositions
- Trademarks, trade names, or brand names
- Franchises, licenses, or contracts
- Methods, programs, systems, procedures, campaigns, surveys, studies, forecasts, estimates, assembled workforce, customer lists, or technical data
- Other similar items

(2) An item is considered similar if it derives its value not from physical attributes, but from its intellectual content or other intangible properties.

(3) The guidelines provided here regarding identifying, documenting, and analyzing the property are applicable to all types of intangible property. This IRM does not provide specific details for every type of intangible property.

(4) Valuations of assets owned and/or transferred by or between controlled taxpayers (within the meaning of Treasury Regulation 1.482-1(i)(5)) may present substantive issues that are not addressed in these guidelines. See IRM 4.61.3, Development of IRC 482 Cases, which provides general guidelines in the development of IRC 482 cases.

4.48.5.1.2 (09-22-2020) Authority

(1) See IRM 4.48.1.1.2, Overview of Engineering Program, Authority.

(2) This document incorporates by reference the ethical and conduct provisions, contained in the Office of Government Ethics (OGE) Standards of Ethical Conduct, applicable to all IRS employees.

4.48.5.1.3 (09-22-2020) Roles and Responsibilities

(1) See IRM 4.48.1.1.3, Overview of Engineering Program, Roles and Responsibilities.

4.48.5.1.4
(09-22-2020)
Program Objectives and Review

(1) See IRM 4.48.1.1.4, Overview of Engineering Program, Program Objectives and Review.

4.48.5.1.5
(09-22-2020)
Related Resources

(1) The Engineering website is *https://irssource.web.irs.gov/LBI/SitePages/ENG.aspx*.

(2) Other IRMs in this chapter include:

IRM No.	**Title**
IRM 4.48.1	Overview of Engineering Program
IRM 4.48.2	Valuation Assistance for Cases Involving Works of Art
IRM 4.48.3	Tangible Personal Property Valuation Guidelines
IRM 4.48.4	Business Valuation Guidelines
IRM 4.48.6	Real Property Valuation Guidelines

4.48.5.2
(09-22-2020)
Development Guidelines

(1) Successful completion of a valuation assignment includes defining the valuation issue, planning, identifying critical factors, documenting specific information, and analyzing the relevant information. All relevant activities will be documented in the workpapers.

4.48.5.2.1
(09-22-2020)
Planning

(1) Appraisers will adequately plan the valuation assignment. Their managers will supervise the staff involved in the valuation process.

(2) Quality planning is a continual process throughout the valuation assignment.

(3) Refer to the Engineering webpage at *https://irssource.web.irs.gov/LBI/SitePages/ENG.aspx* for available valuation resources.

4.48.5.2.2
(09-22-2020)
Identifying

(1) In developing a valuation conclusion, appraisers should define the assignment and determine the scope of work necessary by identifying the following:

a. Property to be valued
b. Interest to be valued
c. Effective valuation date
d. Purpose of valuation
e. Use of valuation
f. Statement of value
g. Standard and definition of the value
h. Assumptions
i. Limiting Conditions
j. Scope limitations
k. Restrictions, agreements and other factors that may influence value
l. Sources of information

(2) The interest to be valued may include:

a. Form of ownership, contractual/exploitation rights, etc.
b. Fractional, geographic, exclusive/non-exclusive interest
c. Consideration of asset life

4.48.5.2.3
(09-22-2020)
Defining and Documenting

(1) In developing a valuation conclusion, appraisers should obtain the relevant information necessary to accomplish the assignment.

(2) Appraisers should begin with a general definition and analysis of what constitutes the intangible property. To have economic value, intangible property should:

- Be subject to specific identification and have a recognizable description
- Be subject to legal existence and protection, which may be incorporated within a larger entity
- Be subject to private ownership and be legally transferable
- Generate some measurable amount of economic benefit
- Potentially enhance the value of other assets with which it is associated

(3) The description of the property should clearly identify the particular intangible property being valued. The description should be unambiguous and provide a complete identification of relevant transactions, and geographic scope of the property, where applicable. It may also specify physical, functional, technical, or economic parameters to identify the particular intangible property.

(4) There may be a need to define what is meant by “intangible asset” from the point of view of the Internal Revenue Code and the Treasury Regulations, specifically, IRC 367(d) and Treasury Regulation 1.482-4(b).

(5) The appraiser should be aware that certain kinds of intangible property are also referred to as intellectual property. Intellectual property is often registered under federal and state statutes for protection. This registration may create legal and economic attributes that relate to value.

(6) Information relevant to the specific property being valued includes:

a. The cost, date, and manner of acquisition
b. The date on which the property is being appraised
c. Any additional appraisals and the date (or dates) on which the property was appraised
d. Information on agreements or understandings entered into (or expected to be) that relate to the use, sale or other disposition of the property, including sales of the property since the valuation date
e. The economic outlook of the market in general and the outlook for the specific property in particular
f. Such other factors which, in the opinion of the appraiser, are appropriate for consideration

(7) If the intangibles subject to valuation have been transferred between or developed by controlled taxpayers within the meaning of IRC 482 and the regulations under that section, additional issues may need to be considered, including which entity owns the intangible. In such cases, prior to conducting the valuation, the appraiser should coordinate with the customer to ensure that all relevant issues have been identified.

4.48.5.2.4 (09-22-2020) Analyzing

(1) In developing a valuation conclusion, appraisers should analyze the relevant information necessary to accomplish the assignment.

(2) All factors that affect the value should be considered including:

- An in-depth analysis of all rights and risks of ownership
- The market conditions near the valuation date
- The near-term and long-term market demand for the subject property
- Effects of relevant contractual or legal restrictions
- Whether the asset needs additional development
- Undivided or fractional interest
- Expected remaining useful life and legal life
- Expected economic benefits
- Feasibility of commercial exploitation if not already commercialized and present state of development
- Existing environmental concerns, if any
- Prior valuation information, if any

(3) Analyze any relevant transactions including:

- All material facts
- Information concerning contracts and transactions, including agreements, instruments, and schedules
- Legal, accounting, financial, economic opinions, and memoranda
- All participants and their roles
- The form of consideration paid and received

(4) Analysis of a transaction may reveal other property or services related to the primary transaction such that a bundle of property rights or services are or should be involved.

(5) Different types of risk assumed by the owner or acquiror could impose requirements on allocation of risk. Risks that may need to be accounted for include:

- R&D risks with success or failure of research activities
- Risk of future environmental concerns
- Manufacturability risks
- Marketing risks from fluctuating costs, demand, and pricing; competitive risks with competitors' responses, or introduction of new products
- Risks associated with government regulation
- Other legal risks such as legal activities required to secure the exclusivity of a product or process

(6) The specific valuation approach, such as market, cost, or income should be appropriate. Judgment should be used to select the approach(es) ultimately used and the method(s) within such approaches that best indicate the value of the property. The relationship between these approaches and fair market value must be demonstrated.

(7) Some fundamental methods utilized to value intangible property include:

a. Market based methods rely on identification of similar intangible property sold under similar conditions. This method requires the existence of an active market involving comparable property, e.g., royalty rates in arms-length transactions.
b. Cost-based methods estimate the cost to reproduce/replace or to pay to purchase the subject intangible (the "make or buy" decision), using his-

torical costs, or reproduction costs. The cost approach for estimating fair market value may be difficult to apply due to quantification problems related to economic obsolescence or future income potential.

c. Income-based methods focus on the income-producing capacity of intangible property. The present value of the net economic benefit to be received over the life of the asset (cash receipts less cash outlays) can estimate the value. The income method relies on estimates, future earnings, the duration of income streams, and risks associated with the realization of the forecasted income. The income approach usually computes the net present value (NPV) of the intangible by use of the discounted cash flow (DCF) method.
d. Monte Carlo (or probabilistic) methods are similar to discounted cash flow methods except that they rely on probability analysis of estimated ranges to produce a statistical prediction of the expected value.
e. Option valuation methods apply to longer term and higher risk intangibles when early expenses are significant, and projected returns are in the distant future.

(8) Only those approaches and methods deemed appropriate for dealing with the valuation issue in question should be analyzed in detail, and reasons should be given for using them. Also, it should be documented why other methods were rejected.

a. The appraiser should check the sensitivity of the methods applied to various assumptions made and parameters used, including sensitivity of projections, discount rates, and useful lives.
b. The stage of development for uncompleted assets may be a determining factor in valuation approach applicability.
c. If an incomplete bundle of rights is being transferred this fact could also affect the choice of the valuation approach.

(9) The appraiser should identify potential comparable properties. As available and appropriate, this should include an explicit, itemized list of selection criteria employed for selecting the comparable intangible assets. In addition to general standards of comparability, namely functions, contractual terms, risks, economic conditions, and property or service, certain refinements may be applied specifically to intangible assets. The comparable intangible should:

- Be used in similar products and processes within the same industry or market.
- Have similar profit potential (as measured by the net present value of benefits to be realized, including a consideration of capital investment and start-up expenses required and the risks to be assumed).
- Have similar terms, including exploitation rights, exclusivity, geographic limitations, duration, grant-back rights, and functions or services to be performed.
- Be in the same stage of development and possess a similar degree of uniqueness.

(10) The market approach should consider the identification and justification of:

- The existence of an active market involving comparable intangibles
- Past transactions of comparable intangibles
- Price information for comparable transactions
- Arm’s length transactions between independent parties

(11) The cost approach begins with an estimate of the cost to reproduce the intangible. One method is using historical cost. Adjustments should be made for obsolescence.

(12) The income approach considers:

a. The income generation capacity of the subject intangible and forecasts the future stream of earnings or cash flow
b. The expected remaining useful life of the intangible, how long the economic benefit is expected to continue, which may depend on product life cycle: introduction, growth, maturity, and decline
c. The risk associated with receiving anticipated benefits, as may be measured by the discount rate reflecting the opportunity cost of capital, inflation, liquidity, real interest, and risk premium

(13) The final opinion of value should reflect the appropriateness of each method, and the veracity and reliability of the data supporting each method, leading the reader logically to the final opinion of intangible value. It should ensure applied methods' results yield similar levels of value, reconcile the results, and set forth all assumptions and limiting conditions affecting the analyses, opinions, and conclusions.

4.48.5.2.5
(09-22-2020)
Workpapers

(1) Workpapers should document the steps taken, techniques used, and provide evidence to support the facts and conclusions in the final report.

(2) Appraisers will maintain a detailed case activity record (Form 9984, Examining Officer's Activity Record) which is prepared consistent with IRM 4.48.1.4.

(3) The case activity record, along with the supporting workpapers, should justify time spent as commensurate with work performed.

4.48.5.2.6
(09-22-2020)
Reviewing

(1) In reviewing an intangible property valuation and reporting the results of that review, an appraiser should form an opinion as to the adequacy and appropriateness of the report being reviewed and clearly disclose the nature of the review process undertaken.

(2) In reviewing an intangible property valuation, an appraiser should:

a. Identify the taxpayer and intended use of the appraiser's opinions and conclusions, and the purpose of the review assignment.
b. Identify the report under review, the property interest being valued, the effective date of the valuation, and the date of the review.
c. Identify the scope of the review process conducted.
d. Determine the completeness of the report under review within the scope of work applicable in the review assignment.
e. Determine the adequacy and relevance of the data and the propriety of any adjustments to the data.
f. Determine the appropriateness of the comparable and/or valuation methods and techniques used and develop the reasons for any disagreement.
g. Determine whether the analyses, opinions and conclusions in the report under review are appropriate and reasonable, and develop the reasons for any disagreement.

(3) In the event of a disagreement with the report's factual representations, underlying assumptions, methodology, or conclusions, the appraiser should conduct additional fact-finding, research and/or analyses necessary to arrive at a supportable valuation.

4.48.5.3
(09-22-2020)
Resolution Guidelines

(1) The appraiser will, in a supporting role to the internal customer, make efforts to obtain a resolution of the valuation issue after fully considering all relevant facts.

(2) The appraiser will consider, per IRM 20.1.12.7, the applicability of penalties due to incorrect appraisals.

4.48.5.3.1
(09-22-2020)
Objective

(1) The objective, if possible, is to resolve the valuation issue as early in the examination as possible.

(2) The appraiser will work in concert with the internal customer and taxpayer to attempt to resolve all outstanding issues.

4.48.5.3.2
(09-22-2020)
Arriving at Conclusions

(1) Once the appraiser has all the information to be considered in resolving the issue, the appraiser will use professional judgment in considering this information to arrive at a specific conclusion of value.

(2) Appraisers may not have all the information they would like to have to definitively resolve an issue. Appraisers, therefore, should decide when substantially enough information is available to make a proper determination.

(3) Appraisers will employ independent and objective judgment in reaching conclusions and will decide all matters on their merits, free from bias, advocacy, and conflicts of interest.

4.48.5.4
(09-22-2020)
Reporting Guidelines

(1) Appraisers should prepare reports of their findings.

(2) This section requires specific information to be included or addressed in each report.

(3) Role of the Engineering Team Manager – see IRM 4.48.1.1.3.4.

4.48.5.4.1
(09-22-2020)
Overview

(1) The primary objective of an appraisal report is to provide convincing and compelling support for the conclusions reached.

(2) Appraisal reports should contain all the information necessary to allow a clear understanding of the valuation analyses and demonstrate how the conclusions were reached.

4.48.5.4.2
(09-22-2020)
Report Contents

(1) The extent and content of the report prepared depends on the needs of each customer.

(2) Appraisal reports should clearly communicate the results and identify the information relied upon in the valuation process. The report should effectively communicate the methodology and reasoning, as well as identify the supporting documentation.

(3) Subject to the type of report being written, appraisal reports generally should contain sufficient identification, documentation and analysis to ensure consis-

tency and quality. See IRM 4.48.5.2.2, Identifying, IRM 4.48.5.2.3, Defining and Documenting, and IRM 4.48.5.2.4, Analyzing.

(4) Review reports as described in IRM 4.48.5.2.6, Reviewing, shall contain sufficient identification, documentation and analysis as required by IRM 4.48.5.2.2, IRM 4.48.5.2.3 and IRM 4.48.5.2.4, to support the appraiser's assumptions, analyses and/or conclusions.

4.48.5.4.3
(09-22-2020)
Statement

(1) Each written valuation report should contain a signed statement that is similar in content to the following:

To the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions.
- I have no present or prospective interest in the property that is the subject of this report, and I have no personal interest with respect to the parties involved.
- I have no bias with respect to the subject of this report or to the parties involved with this assignment.
- My compensation is not contingent on an action or event resulting from the analyses, opinions or conclusions in, or the use of, this report.
- I have or have not performed services as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- My engagement in this assignment was not contingent on developing or reporting predetermined results
- No one provided significant assistance to the person(s) signing this certification
- My analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with the applicable Internal Revenue Service Valuation Guidelines.

(2) Certification may be amended if appraisers are required to comply with professional designation and or state license requirement.