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IFRS 15

Significance and implications of the new revenue recognition standard

Illustrated on the basis of industry case studies

Supervisor:

Mag. Jürgen Jakopovic

submitted by:

Wolfgang Sauer (1710532017)

Kaindorf an der Sulm, 9/19/2019

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ABSTRACT

Die B4B Solutions GmbH ist ein IT-Dienstleistungsunternehmen spezialisiert auf cloud-basierenden SAP-Systemlösungen (ERP-Systeme). Zusammen mit ihren Kunden führen Mitarbeiter von B4B diese Systemlösungen bei Kunden ein. Zu den Kunden zählen Unternehmen aller Größenordnungen. Somit fallen auch IFRS-Anwender darunter. Aufgrund des Inkrafttretens von IFRS 15 – „Erlöse aus Verträgen mit Kunden", muss auch dieser bei IFRS-Implementierungsprojekten berücksichtigt werden.

Es soll ein Leitfaden erstellt werden, der detaillierte Informationen zum neuen Umsatzrealisierungsstandard enthält. Dieser soll Mitarbeiter der B4B bei Implementierungsprojekten als Anhaltspunkt dienen. Die zugrundeliegende Arbeit dient als Grundlage für den Leitfaden und behandelt, neben der Analyse des neuen Standards, in einem kurzen Rückblick, auch die Vorgänger des IFRS 15. Abschließend werden die Auswirkungen auf den Jahresabschluss anhand von Fallbeispielen veranschaulicht. Die Analyse des aktuellen Standards, als auch die Gegenüberstellung mit den alten Regelungen, basiert auf einschlägiger Fachliteratur. Zur Analyse der Verträge im Praxisteil werden die Resultate des Theorieteils herangezogen.

Die neuen Regelungen zur Umsatzrealisierung wirken sich unterschiedlich auf die einzelnen Branchen aus. Sie veranlassen Unternehmen zur sorgfältigen Analyse ihrer Kundenverträge und führen gleichzeitig zu einer Harmonisierung der bisherigen Regelungen und Interpretationen und bieten eine detaillierte Richtlinie für IFRS-Anwender. Dennoch fallen die Rechnungslegung und die Erlösrealisierung auseinander, was dazu führt, dass Umsätze in andere Perioden verschoben werden. Weiters verlangt der neue Standard detailliertere quantitative als auch qualitative Anhangangaben.

Das Fünf-Schritte Model bietet eine solide Richtlinie für IFRS-Anwender. Weiters nimmt auch die Regelungsdichte zu. Dennoch gibt es noch Ermessensspielräume. Dabei sollte besonders auf die verlässliche Schätzung von Einzelveräußerungspreisen bei variablen Vergütungsbestandteilen geachtet werden. Die neuen Angabepflichten setzen detailliertere Informationen zu Kundenverträgen voraus, wodurch Unternehmen ihre IT-Landschaft entsprechend anpassen müssen. Es stellt sich die Frage ob die entstandenen Einmalkosten überhaupt zu einem nachhaltigen Mehrwert für die Adressaten des Jahresabschlusses führen.

The B4B Solutions GmbH operates as a consulting firm in the IT industry. It is specialized in cloud-based SAP software solutions. Together with their customers, employees of B4B conjointly customize and implement the SAP solutions to update the customers' IT systems. Among its customers reaching from small to large companies, there are also IFRS-applicants. Since the IASB has issued a new revenue recognition standard – IFRS 15 "Revenue from contracts with customers", the new provisions have to be considered in the relevant implementation projects as well.

The preparation of a guideline illustrating the new revenue recognition aims to support the consultants when it comes to the implementation of IFRS projects. This paper serves as a basis for the guideline and covers an analysis of the new revenue recognition standard, briefly reviews legacy-standards and assesses the impacts on annual financial statements. The findings are based on specialist literature and the exemplary analysis of contracts with customers.

The new regulations on revenue recognition have different effects on various sectors and induce companies to thoroughly analyze their contracts with customers to recognize revenue using the new five-step model. The new standard leads to the harmonization of previous standards and interpretations and offers detailed guidance, whereas legacy-standards failed to assist IFRS-applicants. Nevertheless, accounting and billing now diverge, resulting in a shift of revenues to other periods. What is more, is that IFRS 15 requires more detailed quantitative as well as qualitative disclosure.

The five-step model offers reliable guidance for IFRS-applicants. Also, the density of provisions improved. However, there is still a margin of discretion. In particular, the estimation of stand-alone selling prices of variable components within a contract might lead to differences between the billing and the recognition of revenues. The increased disclosure requirements request more detailed information than previously. Thus, the system- and process landscape needs to be adapted, resulting in one-time costs. It is questionable if there will be a sustainable benefit for the users of financial statements.

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ABBREVIATIONS

IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
FASB	Financial Accounting Standards Board
PIT	Point in time
PO	Performance obligation
POC	Percentage of completion
SSP	Stand-alone selling price
US-GAAP	United States – Generally Accepted Accounting Principles

1. INTRODUCTION

The representation of sales revenue in the first line of each company's income statement already indicates the central position of the figure. It is commonly used to assess the economic performance of a company as it is a measure to quantify the extent and the success of products and services sold. As such, it has consistently been a topic in international reporting regulations. However, international standards have diverged over the years. The International Financial Accounting Standards, abbreviated IFRS, contain so-called principle-based standards such as IAS 11 "Construction Contracts" and IAS 18 "Revenue" but do lack guidelines to portray complex transactions. The complete opposite is valid for the US-GAAP. It includes exceptionally general requirements and exceptions for several industries and business transactions. Due to the missing regulations for complex transactions under IFRS, IFRS-reporting entities had to make assumptions which have been based on detailed information the US-GAAP offered.[1] Furthermore, the overwhelming set of rules under US-GAAP led to different accounting treatments, although the underlying transactions had been similar from an economic point of view.

Therefore, the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) agreed to participate in a convergence project. The main objective was to assimilate the two accounting regulations concerning revenue recognition. According to IFRS 15.IN5 the boards cited five reasons to develop a joint revenue standard:[2]

- Remove inconsistencies and weaknesses of actual revenue recognition regulations
- Provide a more robust framework about revenue recognition issues
- Improve comparability of revenue recognition practices between different companies, industries, jurisdictions and capital markets
- Provide more useful information to users through enhanced disclosure requirements
- Reduce the volume of relevant standards and interpretations

As a result, IFRS 15 "Revenue from Contracts with Customers" and the corresponding US-GAAP regulation "ASC 606" have been issued by the IASB and FASB in May 2014, respectively. The IFRS standard supersedes IAS 11 "Construction Contracts", IAS 18 "Revenue", IFRIC 13 "Customer Loyalty Programs", IFRIC 15 "Agreements for the Construction of Real Estate", IFRIC 18

[1] Cf. WALTER/HOLD (2016), pp. 197.
[2] Cf. MORICH (2014), p. 1997.

"Transfers of Assets from Customers" and SIC-31 "Revenue – Barter Transactions Involving Advertising Services".[3] After the publication of IFRS 15 and ASC 606, the standards converged, except for minor differences.
Since then, the IASB and FASB have issued converged amendments to their standards, but they have also issued different amendments to the same topics. Additionally, the FASB has issued several amendments that the IASB has not issued.[4]

IFRS 15 aims to recognize revenue in a manner that represents the transfer of goods and services to a customer at an amount reflecting the consideration an entity expects to receive in exchange for the transferred goods and services. Since the new standard supersedes all legacy revenue recognition standards, the IASB now created a single model for revenue recognition valid for all industries.[5] It is divided into the subsequent five steps:

1. Identify the contract with a customer
2. Identify the performance obligations
3. Determine the transaction price
4. Allocate the transaction price to the respective performance obligations
5. Recognize revenue when or as an entity satisfies performance obligations

The model shall promote greater consistency and comparability across all industries and capital markets.[6] As a result, entities affected will be forced to reassess their revenue recognition policies and might have to adapt them. The consequences depend on the industry in which an entity operates. Nevertheless, entities are faced with changeover or adaption expenditures since costs for the realignment of the existing process and system landscape are inevitable. Accounting and billing now diverge, which means that revenue recognition is now untied from invoicing. Thus, new triggers to launch the revenue recognition process within an IT system surrogate existing billing-triggered revenue recognition processes.[7] To conform with IFRS 15, the system landscape needs to be able to monitor actual stand-alone selling prices for all performance obligations, as well as the transaction price of a contract which might comprise several others. As a matter of fact, existing customer contracts need to be analyzed. Furthermore, effects on covenants need to be identified as well as the impact on KPIs and the financial control as a such.

3 S. IFRS 15.C10.
4 Cf. NARDMANN/GEBERTH/HAUSSMANN (2016), p. 321.
5 Cf. BRÜCKS/EHRCKE/GROTE/ESCHBORN/PILHOFER (2017), pp. 179.
6 Cf. SCHURBOHM-EBNETH/OHMEN (2015a), p. 7.
7 Cf. BARDENS/WALLEK (2016), p. 334.

This paper aims to provide a deep insight into the new revenue recognition standard to prepare a guideline illustrating the main features of IFRS 15. Hence, an extensive analysis of the new revenue recognition standard and the comparison of legacy standards will be covered. For this purpose, it has to be investigated, which changes in terms of the recognition of revenue the new standard implies and which types of contracts are affected. Therefore, the newly introduced five-step-model will be investigated in detail. Furthermore, the impacts on annual financial statements will be assessed as well as implications on main industries such as IT, telecommunications and automobile.

The evaluation of previous standards and interpretations, as well as the analysis of the new revenue recognition standard, will be based on expert literature. The findings concerning the impacts on annual financial statements will be covered through the analysis of contracts. Hence, contracts with customers originating from different industries will be analyzed, and impacts on annual financial statements will be elaborated.

As a result, the first two chapters cover the theoretical part, whereas the last chapter addresses the contract analysis. Finally, a brief résumé highlights the key findings, including a critical appraisal and an outlook on future developments.

2. REVIEW TO PREVIOUS STANDARDS

2.1. IAS 18 “Revenue“ and IAS 11 ”Construction Contracts”

The former revenue standard includes the accounting of revenues from the sale of goods, rendering of services and for interests, royalties, and dividends. According to IAS 18, revenue comprises the inflow of gross benefits in the course of an entity’s ordinary business operations. The performance of service over a specified period renders a stipulated task undertaken by an entity. Revenues resulting from services provided in reference to construction contracts are not within the scope of IAS 18, but IAS 11. Furthermore, revenues from lease agreements (IAS 17 “Leases”), insurance contracts (IFRS 4 “Insurance Contracts”), dividends valued at-equity (IAS 28) as well as revenues from agricultural produce and the quarrying of mineral ores are out of the scope of IAS 18.

Generally, revenue is measured at the fair value of the consideration received or receivable after deducting rebates and cash discounts. If the amount of consideration cannot be observed at the market, the price is derived through the residual approach by deducting the sum of all observable stand-alone selling prices (SSPs) of other goods or services promised in the contract from the total price of the contract. The approach is commonly used for multiple-element agreements, although IAS 18 lacks detailed guidance on how and when to determine separate components as well as their valuation of a contract.[8] As a result, IAS 11 is preferably used since it includes provisions for the determination of separate components in a construction contract.[9] To represent a separate construction contract, the standard requires the ability to separately determine the costs and revenues of each asset within the contract. Otherwise, all assets are consolidated into one contract.[10] With regard to the recognition of revenue through the sale of goods, five criteria are noted. The transfer of the significant risks and rewards of ownership to the buyer is a crucial criterion. Warranties are accounted for under IAS 37 “Provisions, Contingent Liabilities and Contingent Assets”. If a good is sold, a warranty provision has to be set up.[11] Revenues from the rendering of services should be recognized by applying the percentage-of-completion method. The entity determines the stage of completion of the transaction at the balance sheet date. As a prerequisite, specific criteria such as the reliable measurement of the amount of revenue and the

8 Cf. SCHURBOHM-EBNETH/VIEMANN (2015b), pp. 181.
9 Cf. BOHNEFELD/EBELING/VITINIUS (2018), p. 8.
10 S. IAS 11.8-10.
11 S. IAS 37.C4.

stage of completion must be met.[12] In any other case, the cost-recovery approach has to be applied, leading to the recognition of revenue to the extent of the expenses recognized that are recoverable.[13] If it is not probable that neither proceeds will be generated nor costs will be covered, the costs incurred are expensed.[14] Revenues resulting from interests, royalties and dividends can only be recognized if the amount can be measured reliably. Whereas for interests the effective interest method (IAS 39) is used, royalties are considered on an accrual basis. Dividends are only considered if the shareholder's right to receive a payment is established. [15]

2.2. IFRIC 13 "Customer Loyalty Programs", IFRIC 15 "Agreements for the Construction of Real Estate" and IFRIC 18 "Transfers of Assets from Customers"

Published by the International Financial Reporting Interpretations Committee (IFRIC) IFRIC 13 includes regulations concerning customer loyalty programs. It addresses the accounting when entities use incentives to sell goods or services through providing awards as part of a sales transaction. If a customer buys goods or services, the entity grants the customer award credits (e.g. "air miles" or "loyalty points") which the customer redeems for free or discounted goods or services. Since claimed award credits reduce the transaction price revenue can only be recognized as the difference between the transaction price and the value of the award credits. The value of award credits is derived by its fair value, resulting in an amount the entity would charge if it would sell the award credits.[16]

IFRIC 15 is applied by entities that undertake the construction of real estates. It accounts for the revenue and associated expenses regardless of an entity's direct construction activities or its use of subcontractors. Two issues are addressed. First, is the construction agreement within the scope of IAS 11 or IAS 18? Second, when should the revenue from the construction of real estate be recognized? IAS 11 is applied if the agreement fulfills the definition of a construction contract of IAS 11. This is the case if the buyer can specify the major structural elements of the design concerning the real estate before the construction starts. If the buyer can specify major structural changes during the construction progress, IAS 11 is applied as well. However, if the buyer has

[12] S. IAS 18.20.
[13] S. IAS 18.26.
[14] S. IAS 18.28.
[15] S. IAS 18.29-30.
[16] Cf. DELOITTE TOUCHE TOHMATSU LIMITED (2007), Online source [23.01.2019], pp. 1.

only limited ability to influence the design or can only specify minor variations, the agreement falls within the scope of IAS 18 (agreement for the sale of goods).[17]

IFRIC 18 provides additional guidance on reporting the transfer of assets from customers. It is particularly relevant to utility companies in situations where a customer gives an item of property, plant or equipment (PPE) or cash to acquire this item to a company, which subsequently uses the item to provide the customer with the supply of, for example, electricity or gas. Hence, the entity must either use the item to connect the customer to a network, provide the customer with ongoing access to a supply of goods or services, or both. If one service is identified, revenue is recognized when the service is performed. If there is more than one separately identifiable service, the fair value of the total consideration received or receivable is allocated to each service. In both cases, the recognition criteria of IAS 18 are applied.[18]

2.3. SIC-31 "Revenue – Barter Transactions Involving Advertising Services"

An entity might provide advertising services in exchange for advertising services from its customer. This type of arrangement is called a barter transaction and does not necessarily include cash or other considerations. The seller providing advertising services in the course of its regular activities recognizes revenue in accordance to IAS 18 when, besides other requirements, the services exchanged are dissimilar, and the amount of revenue can be measured reliably. SIC-31 issued by the Standards Interpretations Committee (SIC) only applies to exchanges of different advertising services.[19] Furthermore, revenue from a barter transaction, including advertising, cannot be measured reliably at the fair value of advertising services received. The interpretation however, knows certain requirements for a seller to measure revenue at the fair value, which will not be elaborated throughout this thesis.[20]

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17 Cf. BDO IFR ADVISORY LIMITED (2016a), Online source [25.01.2019], p. 2.
18 Cf. BDO IFR ADVISORY LIMITED (2016b), Online source [23.01.2019], p. 3.
19 Cf. WALTER/HOLD (2016), p. 201.
20 Cf. BDO IFR ADVISORY LIMITED (2016c), Online source [22.01.2019], p. 3.

3. THE NEW STANDARD

3.1. Objective, effective date and transition

3.1.1. Overview of the standard

As illustrated in the introduction above, IFRS 15 and the FASB's standard (ASC 606) largely converged. The new revenue standards issued in May 2014 supersede virtually all former revenue recognition requirements under IFRS and US GAAP.[21] As a result, accounting requirements for almost all revenues arising from contracts with customers were revised. Thus, entities that enter into contracts with customers to provide goods or services are affected, except the contract is in the scope of another IFRS(s) or US GAAP regulation. An example would be leasing, which is regulated by IFRS 16.[22] Consequently, entities affected need to reassess their revenue recognition principles and may be forced to revise them. Revenue recognition might not change for simple contracts with regard to the timing and the amount to realize, rather complex contracts will be affected. Additionally, IFRS 15 requires more and different disclosures.

An entity presents a contract with a customer either as a contract liability, a contract asset, or a receivable. The presentation in the balance sheet depends on the relationship between the entity's performance and the customer's payment at the reporting date. If the entity transferred goods or services to the customers before or at the reporting date, the entity recognizes a contract asset or a receivable. A contract asset is recognized if an entity's right to consideration is depending on something else than the passage of time.[23] In any other case, it is recognized as a receivable. In case the customer already paid consideration, or if the payment is due as of the reporting date, but the entity has not transferred the goods or services promised, a contract liability is recognized.

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21 Cf. SCHUHRBOHM-EBNETH/VIEMANN (2015), p. 181.
22 S. IFRS 15.5.
23 Cf. GRANT THORNTON INTERNATIONAL LTD. (2016), Online source [24.01.2019], p. 18.

3.1.2. Effective date

IFRS 15 is effective for annual reports beginning on or after 1 January 2018. Early adoption is permitted but has to be disclosed. If the financial year is similar to the calendar year, 1 January 2018 is set as the adoption date. In case the entity concerned reports twice a year – annual and half-year – IFRS 15 is present in the interim financial statements on 30 June 2018 or in the annual financial statements on 31 December 2018. However, if the financial year ends on 30 June 2018, 1 July 2018 is set as the adoption date. Following that, the new standard will be present in the interim financial statements of 31 December 2018 or in the annual financial statements of 30 June 2019.[24]

3.1.3. Transition methods

For the first (initial) application of the new standard, IFRS 15.C3 offers two options – either the full retrospective method or the modified retrospective method. In 2016, the IASB published an amendment to ease the transition. An entity is exempted from restating contracts that are already completed at the beginning of the earliest period presented in the financial statements when using the full retrospective method. If the entity decides to use the modified retrospective method, it either has to apply IFRS 15 to those contracts not completed at the date of initial application or to all contracts, including the completed contracts.[25] The date of the initial application marks the start of the period in which an entity applies IFRS 15 for the first time. If the annual reporting period ends on 30 June 2017 the date of initial application would be 1 July 2018. The selected transition method has no impact. A contract is completed, if the entity has fully transferred all identified goods and services to the customer before the date of the initial application.[26]

If an entity elects the full retrospective method, the provisions have to be applied to each period presented in the financial statements. As a consequence, IFRS 15 has to be applied as if the contracts with customers have been recognized under the new standard since its inception. This option would result in an adjustment to the opening balance of equity in the earliest comparative period.[27] With this IAS 8 – “Accounting Policies, Changes in Accounting Estimates and Errors” has to be considered. Since the analysis of all contracts would imply a tremendous effort, the IASB agreed on practical expedients noted in IFRS 15.C3-C7.[28] Completed contracts that begin

[24] Cf. ERNST & YOUNG GLOBAL LIMITED (2017), pp. 10.
[25] Cf. BARDENS/WALLEK (2016), pp. 333.
[26] S. IFRS 15.C2.
[27] Cf. DELOITTE TOUCHE TOHMATSU LIMITED (2018), Online source [02.03.2019], p. 9.
[28] S. IFRS 15.C3 – IFRS 15.C7.

and end within the same annual reporting period do not need to be restated. An entity applying the standard for the business year ending 31 December 2018 would not have to restate contracts that were entered into and completed in 2017. What is more, is that contracts completed at the beginning of the comparative year in the annual reports are excluded as well. If an entity's business year ends on 31 December 2018 (first application of IFRS 15 and subject to reporting) and the comparative year presented ended on 31 December 2017, contracts completed by 31 December 2016 do not need to be evaluated as well. Completed contracts might have included variable considerations. As the ultimate consideration cannot be determined at the beginning of the contract, the transaction price includes an estimate for the variable consideration. As the contract has already been completed, the consideration might have ceased to be variable as well. Therefore, earlier revenue figures used in an annual report may include the consideration ultimately payable or the estimate at the date the contract was completed instead of the estimate for the variable consideration that was assumed at earlier dates.

Should the entity elect the modified retrospective approach, the standard will only be applied to the last period presented in the financial statement. The cumulative effect of previous years will be shown as an adjustment in retained earnings to the opening balance at the date of initial application.[29] Hence, entities do not need to evaluate contracts that have been completed before this date (e.g., 1 January 2018). Trabelsi states that early adopters in his study elected the modified retrospective approach since the full approach is more demanding from a recordkeeping perspective resulting in higher costs.[30] Even though a full retrospective approach would lead to better comparability and thus be preferred by investors and financial analysts, necessary efforts and costs of collecting and processing information related to all contracts with customers might prevail in the decision making process.

The following example aims to illustrate the above. A contract has been concluded between an entity and a customer for of four years (01.01.2015 – 31.12.2018). Current regulations suggest annual revenue amounting to Mio € 100. According to IFRS 15, Mio € 670 would have been reported in 2015 and Mio € 110 in the following years until the end of 2018. The full retrospective method requires the entity to recognize Mio € 110 in 2017 and 2018. Since Mio € 250 have been reported in both, 2015 and 2016 instead of Mio € 670 in 2015 and Mio € 110 in the subsequent year 2016, the cumulative effect as of 01.01.2017 amounts to Mio € 280. The amount will be considered in the retained earnings of the 2017's opening balance. The modified retrospective method enables the entity to report the revenue by old revenue recognition standard. Therefore,

29 Cf. TRABELSI (2018), pp. 6.
30 Cf. TRABELSI (2018), p. 8.

the old revenue scheme will be retained until the end of 2017, resulting in a cumulative effect of Mio € 140.

In Mio €	2017 Comparative Period	2018 Reporting Period	Total
Current Regulation			
-Revenue	250,00	250,00	500,00
IFRS 15 full retrospective method			
-Revenue	110,00	110,00	220,00
-Cumulative effect as of 01.01.2017	280,00		280,00
IFRS 15 modified retrospective method			
-Revenue	250,00	110,00	360,00
-Cumulative effect as of 01.01.2018	140,00		140,00

Full	2015	2016	2017	2018	
IFRS 15	670,00	110,00	110,00	110,00	
Revenue recognized	250,00	250,00			
Cumulative Effect	420,00	-140,00			**280,00**

Modified	2015	2016	2017	2018	
IFRS 15	670,00	110,00	110,00	110,00	
Revenue recognized	250,00	250,00	250,00		
Cumulative Effect	420,00	-140,00	-140,00		**140,00**

Table 1: Full vs. Modified Retrospective Method, Source: based on BARDENS/WALLEK (2016), p. 334.

3.2. Scope

IFRS 15 is applied to all contracts with customers providing goods or services as part of an entity's ordinary business operations. Thereof, the following contracts are excluded:[31]

- Lease contracts within the scope of IFRS 16, which supersedes IAS 17 Leases
- Insurance contracts within the scope of IFRS 4 – "Insurance Contracts", respectively by IFRS 17, which supersedes the current standard in 2021. As of today, an entity can elect to apply IFRS 15 to certain service contracts according to IFRS 17.8
- Financial instruments and other contractual rights or obligations within the scope of IFRS 9 – "Financial Instruments", IFRS 10 – "Consolidated Financial Statements", IFRS 11 – "Joint Arrangements", IAS 27 – "Separate Financial Statements", IAS 28 – "Investments in Associates and Joint Ventures"
- Non-monetary exchanges between entities in the same line of business to facilitate sales to customers or potential customers (e.g., oil companies exchanging raw oil to meet the demand of their customers at their respective locations)

3.2.1. Definition of a customer

In many cases, the customer is easy to identify. Some transactions might involve multiple parties so that it is less clear which counterparties are customers. Appendix A of IFRS 15 describes a customer as a party that has entered into a contract to obtain goods or services that are a product of an entity's ordinary business activities in exchange for consideration.[32] In its publication from October 2017, Ernst & Young includes an example to showcase the difficulties of identifying customers.[33] It is referred to as an entity providing internet-based advertising services to other companies. As a part of their business operations, the entity purchases banner-space on websites from a selection of publishers. Some contracts include sophisticated services as the matching of ad placement to pre-specified criteria of the advertising party. Furthermore, the entity pre-purchases the space from the publishers before it continues to find advertisers for the latter. It is assumed that the entity is acting as a principal in these type of contracts. As a result, the customers of the entity are the advertisers. Other contracts do not include sophisticated ad-targeting services but match advertisers with the publishers in its portfolio. Here, the entity acts as an agent and would identify the publishers as customers.[34]

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[31] S. IFRS 15.5.
[32] S. IFRS 15.A.
[33] Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], p. 28.
[34] Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], p. 28.

It is a common practice in the health care industry that there are multiple parties involved. Besides patients and service providers, third parties such as (statutory) health insurances or the government itself may be included as they incur a part of or all expenses for the service provided.[35] Consequently, the identification of customers requires a detailed analysis. The patient will usually be identified as a customer, regardless of the actual party bearing the costs. According to IFRS 15.9, oral agreements or business practice are sufficient and do not postulate a written agreement.[36] It is notable at this point that the identification of the performance obligations in a contract could have a significant impact on determining which party represents a customer for the entity.

Nevertheless, some transactions might not only include customers but collaborators or partners. These partnerships share the risks and benefits of the development of new products to be marketed.[37] It is a common approach in the oil and gas and the pharmaceutical industry. The IASBs' Basis for Conclusion state that this type of contract is not within the scope of IFRS 15 but might still include a vendor-customer relationship. Until now, there is no additional guideline to determine precisely, which revenue-generating arrangements are within the scope. Thus, Ernst & Young recommends determining whether a transaction reflects a vendor-customer relationship or an agreement between partners.[38]

3.2.2. Interaction with other standards

Besides the publication of IFRS 15, another heavyweight has been revised. For annual periods beginning on or after 01.01.2019, the new leasing standard IFRS 16, which supersedes IAS 17 will be effective. Due to their comprehensive and detailed application guidelines, various questions of interpretation arose and are subject to many professional discourses. Despite their different effective dates, business transactions might already include both IFRS 15 and IFRS 16 matters. Therefore, an interaction between both standards is required and raises the question of how to deal with IFRS 15 and the current leasing standard in the transition period until IFRS 16 has to be initially exercised. Since goods and services are frequently offered as a bundle, a macroeconomic trend towards a service-oriented society can be observed. [39] Market participants increasingly try to provide additional value for their customers by offering goods or services related to the core product. This can be the case if a company decides to rent machines and additionally concludes a maintenance agreement, including a 24-hour service. This type of agreement is partially

[35] Cf. BARDENS & WALLEK (2016), p. 332.
[36] S. IFRS 15.9.
[37] Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], pp. 28.
[38] Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], p. 29.
[39] Cf. BARDENS/CZYMOCH/WALLEK (2018), p. 261.

covered by IFRS 16 and by IFRS 15. According to IFRS 15.7 other standards (such as IAS 17 respectively IFRS 16) take precedence when it comes to the allocation of contract components if they offer an explicit provision.[40] With regard to accounting, IFRS 15 excludes leasing issues, although IFRS 16 references to IFRS 15.73-90 if the underlying contract contains more than one component. Due to these partly contradictive regulations margins of discretion ensue.

Interactions between IFRS 15 and IFRS 16 occur if a contract or a bundle of contracts contain leasing as well as non-leasing components.[41] In this case, the contract has to be split, and its components will be recognized separately.[42] Components of a contract such as a management fee collected by the lessor that do not lead to the transfer of a good or service do not represent a separate component. IFRS 16.B33 indicates that it is merely a part of the overall consideration.[43] To ease the handling of leases, IFRS 16.15 simplifies the handling of leases for the lessee.[44] The lessee is allowed to decide whether to separately report leasing and non-leasing components or report all components as a lease for each class of assets. In contrast, lessors have to separate leasing from non-leasing components. That is because a lessor is usually aware of leasing and non-leasing components within a contract as he determines the price for each component.
As a result, lease components that meet the definition of a lease (IFRS 16.9), fall within the scope of IFRS 16, non-lease components will be covered by IFRS 15. To recognize the components in the financial statement, the allocation of the transaction price to each leasing and non-leasing component is necessary. Since IFRS 16 does not include any guidelines about the determination of stand-alone selling prices, it is referred to IFRS 15.79. The content of the referred article will be approached in chapter 3.3.4 in more detail.

[40] S. IFRS 15.7.
[41] S. IFRS 15.17 and IFRS 16.B2.
[42] S. IFRS 16.12.
[43] S. IFRS 16.B33.
[44] S. IFRS 16.15.

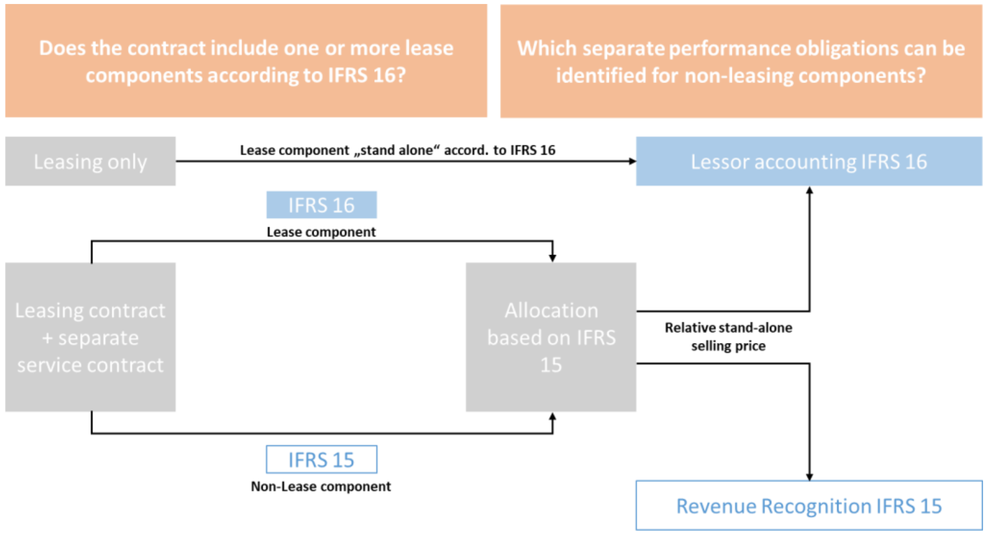

Figure 1: Allocation of lease and non-lease components, Source: BARDENS/CZYMOCH/WALLEK (2018), p. 262.

To recognize revenue in accordance with IFRS 15, a contract has to be on hand. IFRS 15.10 states that for a contract, enforceable rights and duties must be part of an agreement.[45] Shall neither of the parties have fulfilled the agreement and the contract is terminable at call without reimbursement, the requirements of IFRS 15 are not met, and therefore no contract is on hand. Concerning the contract period, an extension option that is highly likely to be called does not influence the contract period under IFRS 15. It is argued that there are no enforceable rights and duties for the extension period. However, IFRS 16 identifies a lease contract, if the control to use a specified asset is conveyed to a third party for a stipulated period for consideration. Thus, the lease period comprises the irredeemable rental period as well as extension or termination options if their exercise is more likely than not.[46] Due to the different approaches of IFRS 15 and IFRS 16, it is up for discussion which contract period has to be determined for a multi-component contract.

The following example illustrates the interaction between the two standards. The Papers AG provides an online newspaper service (access to premium contents) as well as an iPad to access the contents for the contract period. The device will be returned at the end of the contract period. The initial contract period includes twelve months but will be extended for another year if the customer does not terminate the contract. The extension is valid for both the service and the device. The customer pays a monthly fee of € 30,00 and tends to extend the contract due to its economic incentive.

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[45] S. IFRS 15.10.
[46] S. IFRS 16.18.

Components	Type	Contract period (IFRS 15)	Contract period (IFRS 16)	Contract period calculation	Price/Month	SSP/Month	rel. SSP
Newspaper	Service	12 months		12 months	30,00	20,00	40%
iPad	Leasing		24 months	12 resp. 24 months		30,00	60%

Calculation						
Alternative I	Contract period	12 months	**Overall Transaction price**			
	Price/Month	30,00	Year 1	Service	144,00
	Transaction Price	**360,00**		Device	216,00
	hereof Service	144,00	Year 2	Service	-
	hereof Device	216,00		Device	216,00
			Sum		**576,00**
Alternative II	Contract period	24 months	**Overall Transaction price**		
	Price/Month	30,00	Year 1	Service	144,00
	Transaction Price	**720,00**		Device	216,00
	hereof Service	288,00	Year 2	Service	144,00
	hereof Device	432,00		Device	216,00
			Sum		**720,00**

Table 2: Interaction of IFRS 15 and IFRS 16, Source: own.

Because of the economic incentive, the customer will not terminate the contract after twelve months which leads to a lease period of 24 months in accordance with IFRS 16. With regard to the service component under IFRS 15, enforceable rights and duties only exist for twelve months. Therefore, two alternatives can be identified, illustrated in **Fehler! Verweisquelle konnte nicht gefunden werden.**. The minimum contract duration influences the transaction price of the first alternative for both, the lease and the non-lease component of twelve months as well as by the additional twelve months of a contract extension for the lease component. The portion of the lease component for the additional twelve months does not influence the allocation between the lease and non-lease component since the minimum contract period serves as a basis. The transaction price for the minimum contract period amounts to € 360,00. Hereof, 40 percent account for the newspaper service and 60 percent account for the lease component. For the additional twelve months, it can be assumed that the consideration is equal to the consideration paid in the first twelve months. This leads to an overall transaction price of € 576,00.

Nevertheless, the transaction price could be calculated based on the lease contract term, which is 24 months. As a result, the transaction price would increase to € 720,00. Hereof, € 288,00 would be allocated to the service, and € 432,00 would be allocated to the lease component.

3.3. Five Step Approach

The process of revenue recognition is based upon the five-step approach, which is illustrated in Figure 2 below. First, the contract needs to be reviewed to assure its relevance to the new standard. Therefore, step one includes the definition of a contract as well as the treatment of modifications and combinations of contracts. Second, each performance promise (goods and services) is reviewed. In this step, performance obligations are determined. These performance obligations need to be distinct in order to be recognized as such. Otherwise, the underlying goods or services are combined to a bundle until they meet the requirement of distinction. Third, the consideration called transaction price is calculated. This is the revenue the entity generates for transferring goods and services promised in the relevant contract to the customer. The transaction price comprises fixed, variable, significant financing components, and others. Next, the consideration (revenue) determined in step three is now allocated to each identified performance obligation. Thus, the revenue recognition of each performance obligation is ensured as soon as the obligation is satisfied. For that reason, so-called relative stand-alone selling prices are used. Lastly, the revenues are recognized when the control of the goods and services is transferred to the customer. The transfer of control can be performed over time or at a point in time.[47]

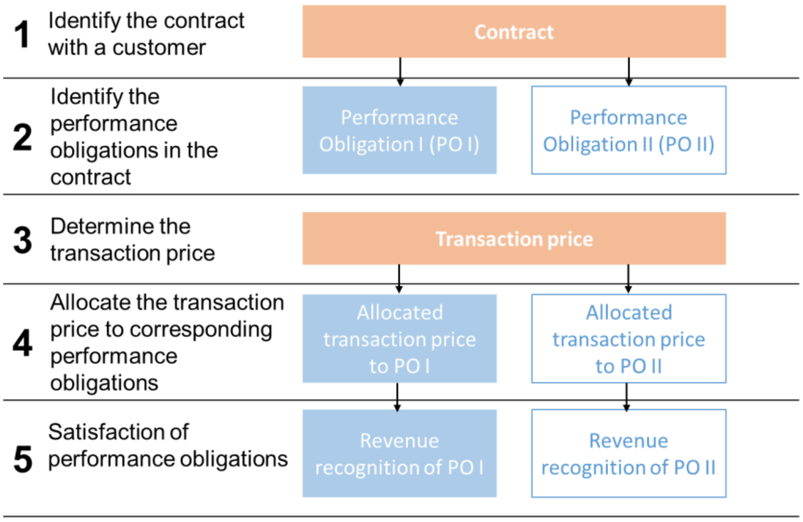

Figure 2: Five Step Model, Source: WULF/HARTMANN (2016), p. 87.

The separation into five steps has already been conceptually covered in the first draft ED/2010/6. Since then, only marginal fine adjustments have been made. In the subsequent sections, the fundamental concept is discussed in great detail and illustrated by various examples.

47 Cf. MORICH (2014), pp. 1997.

3.3.1. Step I - Identify the contract with a customer

The recognition of revenue implies an underlying contract. According to IFRS 15.10, a contract comprises each agreement between at least two parties which results in enforceable rights and duties.[48] As a guideline to determine if an agreement meets the criteria within the scope of IFRS 15, the boards require the presence of the following attributes:[49]

- Parties to the contract have approved and are committed to performing their obligations.
- The rights of each party concerning the goods and services to be transferred can be identified.
- Payment terms can be identified.
- Commercial substance is given.
- The collection of the consideration for the transfer of goods and services is probable.

These requirements will be assessed at the inception of the agreement. In case the criteria are met, it is a contract within the scope of IFRS 15. The entity only needs to reassess the agreement if an indication occurs that facts or circumstances changed significantly. In this case, transferred goods or services, reported receivables, contract assets or revenues recognized are not subject to the reassessment, rather unfulfilled obligations and the entity's ability to collect the remaining consideration for the goods and services pending to transfer. If the criteria are not met at the inception, the entity has to continuously evaluate if the criteria are met at a later point in time.[50] Should the entity receive a consideration despite the absence of an attribute, revenue can only be recognized if the entity has transferred all goods or services to the customer and in exchange has received the full or essentially the full consideration which is non-refundable. This is true for contracts that have been terminated but are not subject to refunds as well.[51] Until the requirements of paragraph 15 or paragraph 9 are met, the entity reports considerations received as a liability. This represents an entity's obligation to either transfer goods or services promised to the customer or refund the consideration received.

It is insignificant whether the agreement was reached on a written, oral, or factual basis since the enforceability of legal claims depends on the respective legal framework.[52] Thus, as long as each party has not yet fulfilled the stipulated terms and is still entitled to withdraw from the agreement without the duty of indemnification, no contract has been concluded.[53] Moreover, IFRS 15.17

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[48] S. IFRS 15.10.
[49] S. IFRS 15.9.
[50] S. IFRS 15.13.
[51] S. IFRS 15.15.
[52] Cf. MORICH (2014), p. 1998.
[53] S. IFRS 15.12.

suggests to combine contracts from an accounting perspective if the respective contracts were negotiated together, include a common performance obligation or prices are interdependent.[54]

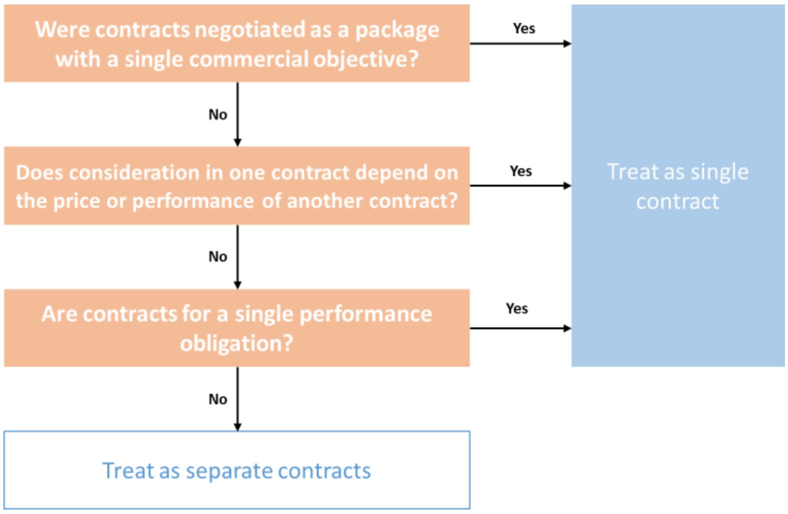

Figure 3: Criteria for combining two or more contracts, Source: GRANT THORNTON INTERNATIONAL LTD. (2016), p. 4.

In case of a contract modification, the new standard might require to treat the alteration as a separate agreement if the latter results in a so-called “stand-alone” (independent) performance obligation which stipulates fair prices for additional goods and services.[55] Thus, both additional distinct goods or services are added to the contract, and the contract price increases by the sum of the goods and services’ stand-alone selling prices (market prices). If the amendment cannot be reported as a new contract, the underlying contract will be terminated. Subsequently, a new contract will be reported, including the still outstanding part of the former contract and the content of the contract amendment. However, this will only be applied if the goods or services still to be transferred can be distinguished from those already transferred.[56]

[54] S. IFRS 15.17.
[55] S. IFRS 15.20.
[56] S. IFRS 15.21.

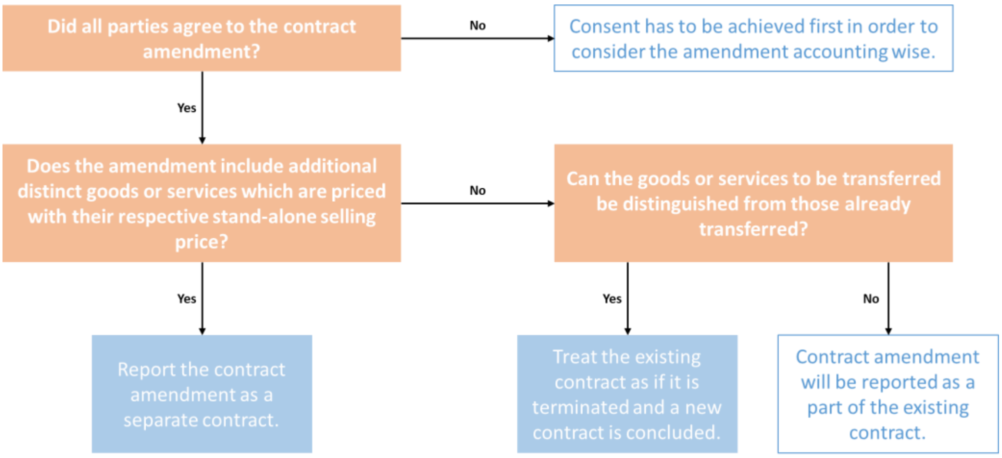

Figure 4: Reporting of Contract Modifications, Source: SCHURBOHM-EBNETH/VIEMANN (2015b), p. 182.

The standard only refers to contracts with customers that result from ordinary operations of the contractor. In case an arrangement does not meet the requirements to be considered a contract under IFRS 15, it has to be accounted with accordance to IFRS 15.15. If the recognition criteria mentioned above (stated under IFRS 15.9) is not met and the entity receives consideration from the customer, revenue must only be recognized either if

- there is no remaining obligation of the entity to transfer goods or services, and the customer has compensated the entity for the goods or services received and cannot claim any refunds or
- the contract has been terminated, and the consideration the entity received is not refundable.

IFRS 15.16 further clarifies that the consideration received from a customer has to be recognized as a liability until the criteria in IFRS 15.9 is met or one of the two events above occurs. The liability represents an entity's obligation to either transfer goods or services promised or refund the consideration received. The amount of consideration is used as a measure for the liability.[57]

3.3.1.1. **Comparison of Step I to previous provisions**

Whereas IFRS 15 focuses on enforceable rights and duties, IAS 32 mainly approaches disclosure and representation requirements of financial instruments and neglects legal enforceability.[58] There has been no redefinition of a contract according to IAS 32 since unintended impacts on the reporting of financial instruments might have been the consequence. Thus, IFRS 15 and IAS 32 diverge in terms of a contract definition resulting in two definitions of a contract.[59] Also, there are

57 S. IFRS 15.16.
58 S. IFRS 15.9 iAw. IAS 32.13.
59 Cf. ALLEN/KALAVACHERLA/MUNTER/O'DONOVAN/SCHURBOHM, (2016), Online source [19.02.2019], p. 31.

differences when it comes to the combination of contracts. Whereas IAS 11 requires an entity to combine contracts to a single contract when the contracts are performed simultaneously or in a continuous sequence, IFRS 15 states, that contracts are combined when the goods or services promised in the contract are a single performance obligation.[60] Furthermore, the new standard provides more specific guidance on when to combine contracts than IAS 18.

3.3.2. Step II - Identify the performance obligations in the contract

The identification of performance obligations (PO) within a contract represents a central element of the revenue recognition under IFRS 15. This is because the transaction price of a contract will be allocated to respective performance obligations. Subsequently, revenue has to be recognized at the time a performance obligation has been satisfied (point in time - PIT) or during the process (percentage of completion – POC) of satisfaction.

Following the identification of a contract with a customer, all goods and services agreed upon have to be determined. If the service or good is economically independent of other services or goods in the contract, it has to be treated as a separate performance obligation.[61] The standard uses the expression ‘distinct’, which relates to the individual good or service or a bundle of goods and services that are substantially the same and have the same pattern of transfer to the customer. Furthermore, IFRS 15.27 distinguishes between abstract (capable of being distinct) and concrete (distinct within the context of the contract) distinction.[62] The former refers to the use of a sole good or service or in combination with immediately available resources to the benefit of the buyer. Upmeier states that the sole availability of a good or service at the market usually indicates the capability of being distinct.[63] The latter addresses the identification of a separable good or service within a contract so that it can be distinguished from other promises in the contract.[64] If the performance obligations of a contract apply as capable of being distinct, the nature of the promise needs to be assessed. Should the contractual agreement aim at the satisfaction of the individual performance promises, they qualify as being distinct. Otherwise, a combined item is promised which does not fulfill the criteria of being distinct.[65] For the determination of a performance obligation, both criteria need to be fulfilled.

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60 Cf. BDO IFR ADVISORY LIMITED (2019), Online source [15.02.2019], p. 153.
61 S. IFRS 15.22.
62 Cf. UPMEIER (2018), p. 370.
63 Cf. UPMEIER (2018), p. 370.
64 Cf. SCHURBOHM-EBNETH/VIEMANN (2015b), p. 183.
65 Cf. UPMEIER (2018), p. 371.

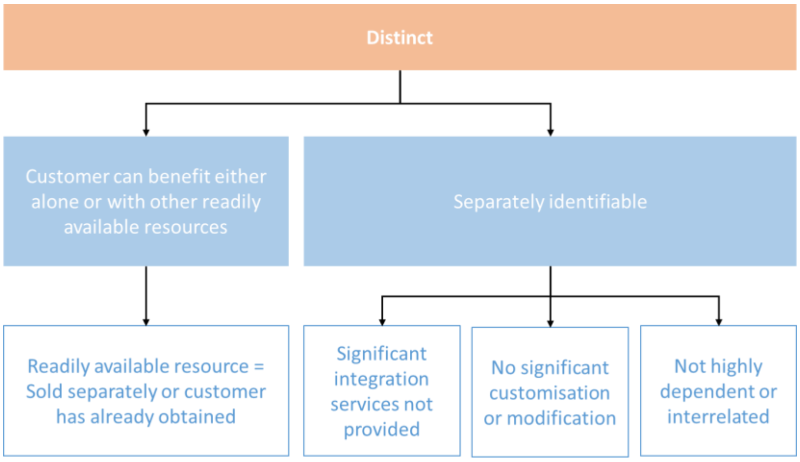

Figure 5: Meaning of 'distinct', Source: GRANT THORNTON INTERNATIONAL LTD. (2016), p. 5.

IFRS 15.26 states that any kind of purchase, resale of goods acquired by the entity, service, construction, manufacturing or development, concession of options and grant of rights can be considered as a distinct good or service.[66] Moreover, the promised good or service shall not be a mere antecedent to other contract components, shall not substantially modify other components and shall not be crucially interdependent or linked to other components.[67] Thus, if a promised good or service is not distinct, the entity is required to combine the respective good or service with other goods and services (included in the contract) until it identifies a bundle of goods or services that, as a whole, is distinct.

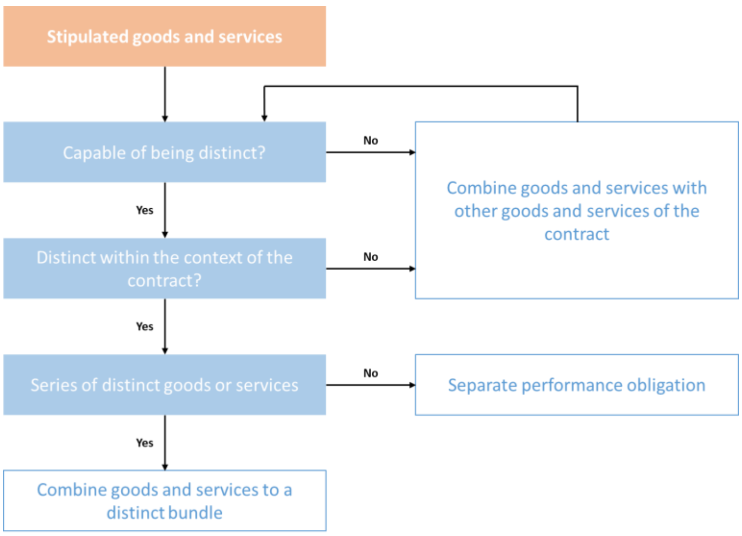

Figure 6: Identification of performance obligations according to IFRS 15, Source: GROTE/HOLD/PILHOFER (2014), p. 410.

[66] S. IFRS 15.30.
[67] S. IFRS 15.29.

3.3.2.1. **Principal versus agent considerations**

According to Brücks et al. transactions featuring intermediary actions have significantly gained in importance through the expansion of the internet and can be found in various embodiments.[68] Especially the telecommunications industry avails itself of business transactions including the direct or indirect sale of products and services from other companies.[69] Hence, the question arises whether the revenue has to be reported as a gross or net figure. If a third party is involved in providing goods or services to a customer the amount of revenue shown in the income statement depends on whether the entity acts as a 'principal', which would result in the representation of a gross amount, or as an 'agent', who acts as an intermediary in behalf of a third party leading to a net figure in an entity's income statement. In this case, the net amount might represent the commission charged by an entity from a third party. However, an entity can only act as a principal if it controls the goods or services prior to their transfer to the customer. Unless an entity does not itself manufacture a good or perform a service, which would always classify the respective entity as a principal, the evaluation of the principal versus agent application is necessary. Since the entity transfers control of or provides its good or service directly to the customer, there is no additional party involved, and therefore it classifies as a principal. IFRS 15.B34 and following provide an insight into a general principle to identify an entity acting as a principal and indicators to define a principal.[70]

The IASB stated in IFRS 15.B34 that an entity could act as both, a principal as well as an agent of separate performance obligations within the same contract. Consequently, it has to be determined for each performance obligation whether the entity acts as a principal or as an agent. At this point, the standard uses the expression 'specified good or service' instead of performance obligation. It is defined as a distinct good or service or a distinct bundle of goods or services to be provided to the customer. [71] The definition is similar to that of a performance obligation, but in the IASB's Basis for Conclusions, the boards noted that the term 'performance obligation' would be confusing in agency relationships.[72] An agent's performance obligation would be to arrange for goods or services provided by another party. Apart from this, providing the specified goods or services to the customer is not the agent's performance obligation. Therefore, the term 'specified goods or services' describes the actual performance – e.g., providing the goods or services rather than the arrangement of the goods and services to be provided by another party.

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68 Cf. BRÜCKS/EHRCKE/GROTE/PILHOFER (2017a), pp. 184.
69 Cf. BRÜCKS/EHRCKE/GROTE/PILHOFER (2017a), pp. 185.
70 S. IFRS 15.B34.
71 S. IFRS 15.B34.
72 S. IFRS 15.BC385B.

If a contract contains more than one specified good or service, an entity can be principal for some specified goods or services and agent for others. IFRS 15.B34A requires two steps to determine the nature of a promise.[73] First, the specified goods or services which will be provided to the customer need to be identified. That is to determine whether an entity provides the specified goods or services or arranges for those goods or services, which will be provided by another party. Second, it has to be evaluated if the entity controls each specified good or service before the transfer to the customer is performed. Subsequently, an entity is a principal if it controls the specified good or service prior to the transfer to the customer. Nevertheless, obtaining a legal title momentarily before transferring the legal title to the customer does not necessarily qualify as control of a specified good or service.[74]

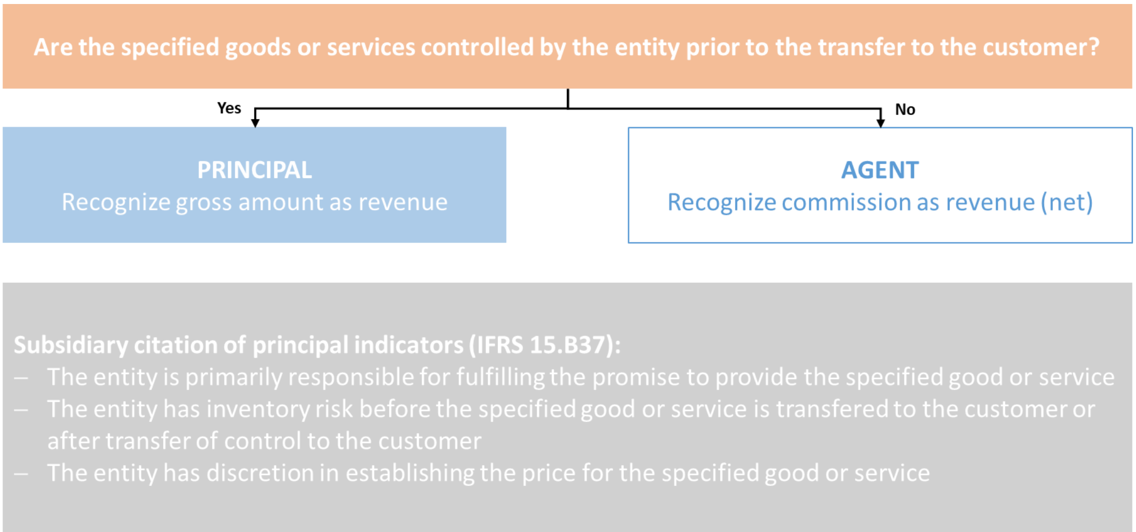

Figure 7: Treatment of Principal- versus Agent-Transactions, Source: BRÜCKS/EHRCKE/GROTE/PILHOFER (2017), p. 186.

Overall, identifying the good or service might be straightforward in terms of tangible assets, but might require significant judgment if intangible goods or services are involved. An entity might resell printers, which would qualify the printer as a specified good which will be transferred to a customer. If it comes to intangible assets, the specified good or service could be the underlying good or service or a right to obtain that good or service. The boards noted that if the specified good or service is a right to a good or service provided by another party, the entity has to determine if its performance obligation is a promise to provide or the arrangement for the other party to provide that right. It is notable, that whether the entity provides the underlying good or service itself or not is immaterial. Example 46A and 47 provide illustrative examples.[75] If a customer wants to buy airline tickets, the right to fly on a specific flight shall be acquired. The entity pre-purchases

73 S. IFRS 15.B34A.
74 S. IFRS 15.B35.
75 S. IFRS 15.IE239-IE243 and IFRS 15.IE238A-IE238G.

airline tickets and will sell these tickets to customers. So, the entity does not fly the plane itself and has no impact on the service – time of the flight or destination. Since the entity obtained the tickets before the identification of a specific customer to purchase the ticket, the entity holds an asset – in the form of tickets – which represents a right to fly. In this case, the entity could either use the right itself or sell and transfer the right to a customer.[76] While Example 47 focuses on a right to use, Example 46A centers upon the underlying good or service. The entity is an office maintenance service provider, and the specified good or service is the underlying office maintenance service. Prior to engaging a subcontractor to perform the service, the entity obtains the contract with the customer. It is important to note, that the right to the subcontractor's service never transfers to the customer, as the entity retains the right and directs the service provider. As a result, the entity can direct the subcontractor to fulfill any customer contract he pleases. With this, the customer is indifferent as to who carries out the services. This is not possible in Example 47 since the customer wants tickets for a specific flight.

3.3.2.2. **Comparison of Step II to previous provisions**

Previous IFRS standards concerning revenue recognition provided limited guidance to identify whether a transaction contains separately identifiable components. Allen et al. suggest that based on analogy to the test in IFRIC 18, an entity should verify if the component has a stand-alone value to the customer and if fair value can reliably be measured. However, the new standard offers detailed information on identifying separate components applying to all revenue-generating transactions. As a result, goods and services exhibiting a strong dependence on other stipulated goods or services might be bundled or unbundled more frequently than under previous practice. Additionally, the new guidance counteracts gaps regarding multi-component contracts, especially in the telecommunications industry.[77]

3.3.3. Step III - Determine the transaction price

The previous sections covered the definition of a contract and the identification of performance obligations within that contract. As a next step, the customer's consideration has to be determined and evaluated. The monetary amount of consideration payable by the customer is called the transaction price, which is based on stipulated contract terms under usual business practices.[78] It is the value that is expected for the transfer of promised goods and services but the number of

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[76] Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], p. 93.
[77] Cf. ALLEN/KALAVACHERLA/MUNTER/O'DONOVAN/SCHURBOHM (2016), Online source [19.02.2019] , p. 49.
[78] S. IFRS 15.47.

third parties acting as agents. Thereby, nature, point in time, and scope of the agreed consideration impact the determination of the transaction price. According to IFRS 15.47, it comprises fixed and variable components as well as a financing component if the latter accounts for a significant amount.[79] Besides that, considerations paid or payable by the entity to the customer or payments other than cash could further have an effect on the determination of the transaction price. It is a significant step in applying IFRS 15 because the amount allocated to the respective performance obligations is the amount recognized as revenue when these obligations are satisfied.

3.3.3.1. **Variable consideration**

Variable components of a transaction price include cash discounts, rebates, performance bonuses, refunds, credits, financial penalties, or similar incentive regulations.[80] Furthermore, the amount of consideration can vary due to a future event. This could be the case if a particular milestone is reached or the sale agreement covers a sale or return policy.[81] These variable scenarios can be explicitly stated in the contract terms. Additionally, IFRS 15.52 relates to two circumstances under which the promised consideration is variable:[82]

- Due to an entity's usual business practices, published policies or other specific statements the customer has an eligible expectation that the entity will accept an amount of consideration which is lower than the price stipulated in the contract, a price concession. Depending on the country, industry, or customer, the concession might be declared as a cash discount, a rebate, a refund or credit.
- Other facts and circumstances imply that the entity intends to offer a price concession if it enters into a contract with the customer.

The above-stated considerations have to be priced in when it comes to the determination of the transaction price. Since the amount has to be estimated, IFRS 15.53 suggests two approaches.[83] The entity must use the method that it expects to predict better the amount of consideration to which it will be entitled. The first method is called expected value. A range of possible consideration amounts is weighted with regard to their respective probability and aggregated to a number. It is used if an entity has a large number of contracts with similar characteristics. If a contract only has two possible outcomes, the entity might use the most likely amount to estimate the amount of variable consideration. It is the single most likely amount in an array of possible consideration

[79] S. IFRS 15.47.
[80] S. IFRS 15.51.
[81] Cf. MORICH (2014), p. 2000.
[82] S. IFRS 15.52.
[83] S. IFRS 15.53.

amounts. Furthermore, the entity has to apply the same method throughout the contract. To determine the variable consideration as accurately as possible, all reasonably available information (historical, current, and forecast) shall be considered. For that reason, the used information should be similar to the information the entity's management would use during a bid and proposal process and in setting prices for goods and services.[84]

Since these estimations can change as well, the entity has to adapt the transaction price accordingly. Should the estimation lead to a transaction price lower than the already received consideration, a reimbursement liability has to be formed.[85] However, variable considerations shall only be included in the transaction price if it is highly probable that there will be no significant reversal of the cumulative revenue recognized when the uncertainty of the variable consideration is finally resolved.[86]

3.3.3.2. **Specific types of variable consideration**

In some contracts, the entity transfers the control of a product to the customer but grants a right to return the product at the same time. If the customer is not satisfied with the product or due to any other reason returns the product to the entity, he receives a full or partial refund of any consideration paid, a credit note for amounts owed or future amounts owed to the entity or another product in exchange.

The following example is used to illustrate the handling of rights to return. A customer purchases several company cars. These cars include a right to return after three years. The agreement qualifies as a customer contract, according to IFRS 15.9.
The treatment of the right to return depends on the type of good and the stated period to return the good.[87] If the right to return can be called within a few days after the purchase at the initial purchase price, the revenue is reduced by the expected rate of return. The exceeding amount – the difference between the initial purchase price and the expected revenue – is capitalized as a refund liability.[88] Also, material costs (nature of expense method) or costs of sale (function of expense method) have to be reduced, and a contract asset has to be recognized for the expected returns.[89] In the case of the disposal of single or a few homogenous goods, revenue has to be realized after the extended deadline for returning the goods. This is due to the lack of an accurate

[84] S. IFRS 15.54.
[85] S. IFRS 15.55.
[86] S. IFRS 15.56.
[87] Cf. GROTE/HOLD/PILHOFER (2014), p. 476.
[88] S. IFRS 15.B21.
[89] S. IFRS 15.B25.

estimation of the rate of return.[90] Instead of the revenue, a contract asset at book value is recognized for the good transferred at the delivery date. In addition, a refund liability is capitalized at the agreed purchase price.[91] If the amount of the refund liability qualifies as essential for the entity, it can be reported as a separate position (sui generis) in the financial statement. Otherwise, it can be disclosed as an other liability.[92]
Since the cars purchased can only be returned after three years, a covered lease agreement is on hand.[93] It qualifies as an operating lease agreement under IAS 17 since the beneficial ownership remains with the seller and only the legal ownership devolves to the consumer.[94]

3.3.3.3. **Significant financing component**

Apart from variable considerations, an entity has to consider whether the contract includes a financing component or not. That might be the case if the contract involves stipulated payment terms or if the entity or customer decides to use a financing strategy. If so, IFRS 15 requires an entity to reflect the time value of money in its estimation of the transaction price. The idea is to reflect an amount received as if the customer had paid cash at the time the goods and services were transferred.[95]

The standard states several factors (but not limited to) to determine whether a financing component is significant or not:

- Any difference between the consideration promised and the cash price
- The combined effect of the expected length of time between delivery of the goods or services and receipt of payment and the prevailing interest rates in the market relevant
-

However, the following scenarios consider indications for non-significant financing components:

- The customer performed payments in advance, but the transfer of the goods and services depends on the customer’s discretion.
- An essential part of the consideration promised is variable based on factors outside the vendor’s or customer’s control as it depends on a future event (e.g., sales-based or usage-based royalties).

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90 Cf. WULF/HARTMANN (2016), p. 89.
91 S. IFRS 15.B21 – IFRS 15.B25; Cf. WULF/HARTMANN (2016), p. 89.
92 Cf. BARDENS/WALLEK (2016), p. 327.
93 S. IFRS 15.B66a and IFRS 15.B70.
94 Cf. WULF/HARTMANN (2016), p. 89.
95 S. IFRS 15.61.

- The difference between the consideration promised, and the cash price does not relate to financing, rather the protection of one of the parties from non-performance by the counterparty.

IFRS 15.63 offers a practical expedient to ignore the impact of a financing component if the entity expects at contract inception that the period between the delivery of goods or services and the payment by the customer will be performed within a year.[96]

To finally adjust the amount of consideration for the time value of money, a discount rate is used, which would be applied in a separate financing transaction between the entity and the customer of the contract. It is notable that the rate depends on the date of the contract inception. It reflects the credit risk of the party receiving credit. That will be the customer if the payment is deferred or the vendor if he receives payments in advance. In addition, the rate has to consider any collateral or security provided by the entity or the customer, including assets transferred under the contract.[97] The effects of the financing component will be separated from revenue as interest expenses or income and presented in the statement of comprehensive income.[98]

3.3.3.4. **Non-cash consideration**

Besides cash considerations, a customer might as well clear his debts in a form other than cash. These so-called non-cash considerations will be measured at fair value to determine the transaction price.[99] A customer might transfer the control of goods or services such as materials or equipment to facilitate the entity's obligations of the contract. If the fair value of non-cash considerations cannot be measured reasonably, the entity indirectly measures the consideration by referring to the stand-alone selling price of the goods or services stipulated in the contract.[100]

96 S. IFRS 15.63.
97 S. IFRS 15.64; Cf. GRANT THORNTON INTERNATIONAL LTD (2016), Online source [24.01.2019], p. 7.
98 S. IFRS 15.65.
99 Cf. MORICH (2014), p. 2000.
100 S. IFRS 15.69.

3.3.3.5. **Consideration paid or payable to a customer**

Customers may receive credit notes, or they are acting as suppliers for an entity themselves. In these cases, the transaction price can be offset against payables. Considerations payable to a customer include amounts an entity pays or is expected to pay to a customer in cash or non-cash.[101] Thus, the transaction price is reduced by the amount the entity owes to the customer. This would be usually applied for credit notes. If the customer acts as a supplier as he transfers distinct goods or services to an entity in exchange of consideration, the transaction price is reduced by the difference between the fair value of the goods or services an entity receives and the consideration the customer (in this case supplier) demands for transferring these goods or services. Should the entity be unable to estimate the fair value, the transaction price will be reduced by the total consideration owed to the customer.[102] The resulting reduction in revenue has to be recognized at the later of the date the revenue is recognized for the transfer of goods or services to the customer and the date the entity pays or promises the payment of the consideration to the customer.

3.3.3.6. **Comparison of Step III to previous provisions**

With regard to variable considerations, the new standard limits rather than precludes revenue recognition which significantly impacts the accounting for revenue under IFRS. IAS 18 states that revenue can only be recognized if an entity can estimate the amount reliably.[103] As a result, uncertainty over the outcome would preclude the recognition of revenue. However, IFRS 15 includes uncertainty and suggests two approaches to estimate the amount.[104]

When it comes to financing components, previous standards are silent on whether an entity adjusts consideration if payment is received in advance.[105] Indeed, consideration is discounted to a present value if payment is deferred and the agreement effectively originates a finance transaction.[106]

The requirement to measure non-cash considerations at fair value is largely similar to previous regulations.[107] IAS 18.12. notes that if the fair value of the goods or services received cannot be measured reliably, the revenue is measured at the fair value of the goods or services transferred,

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101 Cf. MORICH (2014), p. 2000.
102 S. IFRS 15.70-72.
103 S. IAS 18.14.
104 Cf. ALLEN/KALAVACHERLA/MUNTER/O'DONOVAN/SCHURBOHM (2016), Online source [19.02.2019], p. 75.
105 S. IAS 18.11.
106 Cf. ALLEN/KALAVACHERLA/MUNTER/O'DONOVAN/SCHURBOHM (2016), Online source [19.02.2019], p. 86.
107 S. IAS 18.12.

adjusted by any cash transferred.[108] By contrast, IFRS 15 refers to the stand-alone selling price of the goods or services transferred.[109]

Although customer incentives and its accounting is a complex area, IFRIC 13 offers limited guidance other than the specific guidance on customer loyalty programs. There are various forms of incentives, including free or discounted goods or services, discounts and volume rebates, cash incentives, customer loyalty programs, vouchers, and loyalty cards.[110] Up to the new standard, there has been some diversity in practice. Entities considered incentives by reducing revenue, accounting for an expense, or a separate deliverable, depending on the type of incentive.[111]

Barter transactions formerly set out in SIC 31, have no specific guidance under IFRS 15. Consequently, the measuring of consideration follows the general principles.[112] Similar to SIC 31, the new standard does not contain specific provisions on transfers of property, plant and equipment for the legacy standard IFRIC 18. Therefore, an entity applies the general requirements in IFRS 15 and measures revenue at the fair value of the item transferred to the customer if revenue is recognized on the transfer.[113]

3.3.4. Step IV - Allocate the transaction price to corresponding performance obligations

Having discussed how to identify performance obligations, this section addresses ways to allocate the transaction price to performance obligations. An allocation is necessary as soon as a contract contains more than one performance obligation. This step aims to determine an amount for each performance obligation an entity receives for the respective goods and services promised in a contract.[114] Thus, the allocation is of high relevance, especially if obligations are satisfied at different points in time or over a stretch of time. As a result, the recognized revenue is highly dependent on the chosen pattern of revenue recognition. IFRS 15.74 clarifies that the transaction price has to be allocated based on so-called stand-alone selling prices (SSP).[115] The stand-alone selling price is defined as the price at which the isolated promised good or service would have

[108] S. IAS 18.12.
[109] Cf. BDO IFR ADVISORY LIMITED (2019), Online source [15.02.2019], p. 154.
[110] S. IFRIC 13.
[111] Cf. ALLEN/KALAVACHERLA/MUNTER/O'DONOVAN/SCHURBOHM (2016), Online source [19.02.2019], p. 96.
[112] Cf. BDO IFR ADVISORY LIMITED (2019), Online source [15.02.2019], p. 154.
[113] Cf. BDO IFR ADVISORY LIMITED (2019), Online source [15.02.2019], p. 154.
[114] S. IFRS 15.73.
[115] S. IFRS 15.74.

been sold to the customer.[116] Each SSP is determined for each PO and allocated to the transaction price proportionally (relative SSP). Hence, an observable price used by the entity for similar transactions (similar circumstances, similar customers) would be the best fit. The standard names catalog prices and stipulated prices as examples.[117] So, stand-alone selling prices usually are company-specific.

In the event of non-observable prices, an entity has to estimate the SSP in due consideration of market conditions, company-specific factors, and information about the customer. IFRS 15.79 states three approaches to estimate transaction prices.[118]

- **Adjusted market assessment approach**: After evaluating the market in which the entity sells goods or services, the amount the customer would be willing to pay for those goods or services is estimated. Also, prices from the entity's competitors for similar goods or services might be included to adjust the entity's prices since the consideration reflects the entity's costs and margins. It is questionable, however, if the available information can be used for estimation purposes. Prices announced in public might be biased due to a clash of interests. Further, goods sold to wholesalers might include individual contract negotiations leading to different prices depending on the delivered quantity. Therefore, observable prices of competitors should only serve as an orientation.[119] Besides, there might not be any prices observable for highly customized goods.
- **Expected cost plus a margin approach**: This approach would forecast an entity's expected costs to satisfy a performance obligation and add a margin for the PO's underlying good or service. The information concerning target costs (e.g., planned production costs and carrying costs) should already be available. A company-specific margin might be added to the costs although it is questionable to what extent the margin is reasonable. Beside the planned production costs, an entity might as well estimate an obtainable margin. Because of changing business and market developments, and an entity's internal marketing policy calculated profit margins might not be realizable. Upmeier points out that margins might vary between product categories, sales regions, or types of customers. As a consequence, entities might face tremendous efforts to determine product-specific margins.[120]
- **Residual approach**: Sometimes the price of a good or service could be highly variable as it depends on the sales region or the good or service has not been sold separately at the market. In these cases, an entity would estimate the SSP by deducting the sum of all

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116 S. IFRS 15.A.
117 S. IFRS 15.77.
118 S. IFRS 15.79.
119 Cf. UPMEIER (2018), p. 372.
120 Cf. UPMEIER (2018), p. 373.

observable SSPs of other goods or services promised in the contract from the total price of the contract. Nevertheless, this approach can only be applied by paragraph 78 if one of the following criteria is met:[121]

- The same goods or services are sold to different customers at or near the same time for a broad range of amounts. Past transactions or other observable evidence do not reflect a representative stand-alone selling price. As a result, the selling price is highly variable.
- The entity has not yet determined a price for the good or service, and the good or service has not been sold separately in the past. Therefore, the selling price is uncertain.

Moreover, it is possible to combine the stated approaches within a transaction. If a contract contains two or more goods or services that have highly variable or uncertain stand-alone selling prices, the residual approach and an additional method would be used. First, the entity would estimate the aggregate stand-alone selling price for all promised goods or services of a contract that have highly variable or uncertain stand-alone selling prices. Subsequently, another method would be used to estimate the individual stand-alone selling prices of these goods and services relative to the aggregated stand-alone selling price. Yet, the entity has to assure that the allocation of the transaction price to the estimated stand-alone selling prices is consistent with the allocation objective stated in paragraph 73 and all requirements for the estimation of a SSP in paragraph 78.[122]

The figure below illustrates the possible estimation approaches, according to IFRS 15.79.[123]

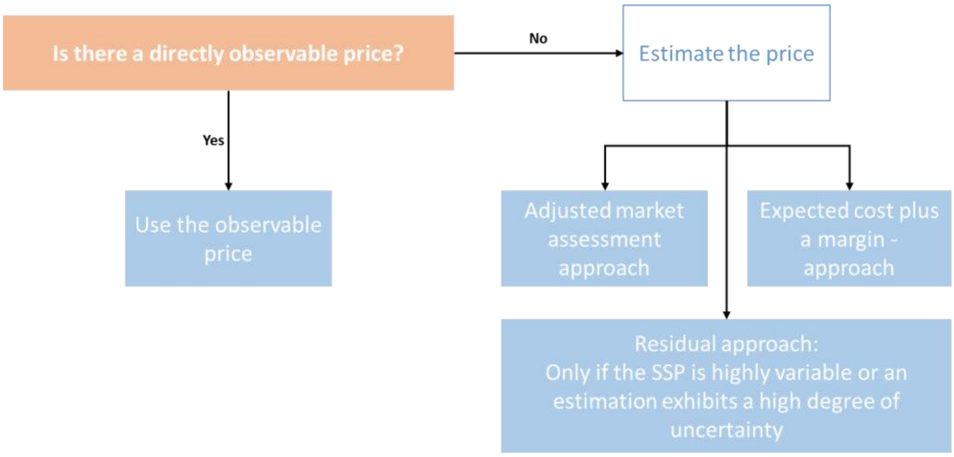

Figure 8: Estimation approaches of stand-alone selling prices, Source: own.

121 S. IFRS 15.78.
122 S. IFRS 15.80.
123 S. IFRS 15.79.

Additionally, discounts and variable considerations might relate to single parts or concern the entire contract. As a consequence, they also have to be allocated accordingly.

3.3.4.1. **Allocating a discount**

As outlined above, discounts have to be considered and subsequently allocated as well if the sum of stand-alone selling prices exceeds the transaction price. In this case, the contract includes a discount which needs to be allocated proportionally to all promised goods and services in the contract. Despite the proportional distribution covered in IFRS 15.81, IFRS 15.82 covers three criteria for allocation to specific performance obligations.[124] First, the respective goods and services are regularly sold on an individual basis. Second, the discount for the respective goods and services is regularly granted for each of them. Third, the granted discount of the sole sale of the good or service is comparable to the discount of the contract examined. All three criteria need to be fulfilled since the regulation aims to avoid cross-subsidization within performance obligations.

3.3.4.2. **Allocating variable consideration**

Similar to a discount, variable considerations might affect the entire contract or parts of it. There might be one or more performance obligations within a contract the discount can be allocated to. However, there might also be cases in which one or more goods or services cannot be distinctly separated so that only a part of one or several performance obligations is concerned. The former might appear if a bonus depends on the entity’s ability to transfer the promised good or service within a certain time frame. The latter could occur if a service contract agreed for several years includes a consideration which is bound to a particular inflation index, which changes during the contract term.[125]

3.3.4.3. **Changes in transaction price after contract inception**

In the event of an alternation of the transaction price, all performance obligations have to be revaluated or as described above, allocated to the corresponding performance obligations, respectively goods, and services. In case a performance obligation is already satisfied, the resulting revenue or decline in revenue has to be recognized in the period of adjustment.[126] It has to be pointed out that the stand-alone selling prices are not altered after contract inception unless the

[124] S. IFRS 15.82.
[125] S. IFRS 15.81 – IFRS 15.82.
[126] S. IFRS 15.88 ff.

contract has been modified. If the transaction price changes due to a contract modification, the requirements mentioned in section 3.3.1 must be followed.[127]

3.3.4.4. **Comparison of Step IV to previous provisions**

Predecessors of IFRS 15 were mostly silent on the allocation of the transaction price to the components of a transaction. Recent interpretations issued by the International Financial Reporting Interpretations Committee (IFRIC) included guidance on the allocation for service concession arrangements, customer loyalty programs, and agreements for the construction of real estate.[128] These interpretations know the following methods to allocate consideration:

- Relative fair value method: components referring to the relative fair values of the different components or
- Residual method: undelivered components are measured at fair value, the remainder of the balance is allocated to those components already delivered up-front[129]

Concerning the allocation of the transaction price, the new standard emphasizes the use of available market inputs. Furthermore, specific guidance for discounts has been introduced. If observable evidence exists that the discount relates to only one or more, but not all performance obligations, the discount is allocated only to those relating. Otherwise, the discount is allocated proportionately to all performance obligations. The stand-alone selling prices serve as a basis for the proportionate allocation.[130]

Unlike in legacy IFRS, the successor provides detailed guidance on variable consideration including a constraint on revenue recognition and an exception for sales- or usage-based royalties.

By contrast, the new standard introduces guidance which is applicable to all contracts with customers within the scope of IFRS 15. Thus, comparability is enhanced, and more discipline and rigor is required in the process of allocating the transaction price.

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127 S. IFRS 15.18-21.
128 S. IFRIC 12; IFRIC 13; IFRIC 15.
129 Cf. ALLEN/KALAVACHERLA/MUNTER/O'DONOVAN/SCHURBOHM (2016), Online source [19.02.2019], p. 100.
130 Cf. BDO IFR ADVISORY LIMITED (2019), Online source [15.02.2019], p. 155.

3.3.5. Step V - Satisfaction of performance obligations

IFRS 15 replaces the former principle-based standards IAS 11 and IAS 18 as well as the interpretations IFRIC 13, IFRIC 15, IFRIC 18 and SIC-31.[131] The new standard is a cross-industry standard and aims to improve the lack of depth in former regulations. Furthermore, former standards IAS 11 and IAS 18 used different revenue concepts. While IAS 11 based on the continuous approach, IAS 18 applied the risk-and-reward approach. Due to the complexity in revenue recognition, the first published standards draft ED/2010/6 “Revenue from Contracts with Customers” focused on an asset-and-liability approach. The consequent implementation of this approach suggests that the total revenue will be recognized only if the control of the promised goods or services is conveyed to the customer. Grote et al. point out that there might be no material change for the majority of transactions. This is because the transition of control often correlates with the assignment of ownership and the resulting transfer of risks and rewards.[132] However, the consistent implementation of the asset-and-liability approach could have impacted the percentage-of-completion method, which is significantly used in international accounting practice. It would have led to substantial shifts of revenues to other periods, affecting a vast number of companies and their respective profit situation. As a result, the IASB neglected the consistent implementation of the control principle and allowed both the recognition of revenues at a point in time and over time.

Principally, revenues have to be recognized if an entity satisfies a performance obligation, thus transferring goods or services to the customer (control principle).[133] Even though services are immaterial, they are regarded as assets which can be consumed directly. IFRS 15.33 further restricts the term ‘control’ as the ability to exclude others to use or benefit the stipulated goods or services.[134]

3.3.5.1. Performance obligations satisfied over time

According to IFRS 15.35, performance obligations are recognized over time if one of the following criteria are met:[135]

- The customer simultaneously receives and consumes the benefits provided by the entity’s performance.

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[131] S. IFRS 15.C10.
[132] Cf. GROTE/HOLD/PILHOFER (2014a), p. 406.
[133] S. IFRS 15.31.
[134] S. IFRS 15.33.
[135] S. IFRS 15.35.

- The entity's performance creates or enhances an asset which the customer controls during the process of creation or enhancement.
- The entity's performance does not create an asset with an alternative use to the entity, and the entity has an enforceable title to the payment of the performance delivered to date.

An entity could be contractually restricted or faced with practical limitations so that it cannot direct the asset for another use. As a result, the asset would not have an alternative use, nonetheless of the characteristics of the asset completed.[136] A contractual restriction prohibits the entity from redirecting the partially completed asset to another customer throughout the production process.[137] In such a case, a customer could enforce its rights to the promised assets. An alternative use has to be determined at contract inception. A practical limitation arises if an entity would suffer an economic loss by directing the asset for another use. If the entity is entitled to an amount that at least indemnifies the completed performances to date, it has an enforceable title to payment even if the contract is terminated by the customer. This is true as long as it is not the entity's failure to perform as promised.[138]

When reporting revenue streams over time, the standard aims to map the progress of the performances completed at any given time. To ensure the continuing recognition of revenues, the percentage of completion of each performance obligation has to be determined at the end of each reporting period. There are different methods available for the determination of the percentage of completion. The entity should select a single revenue recognition method that accurately depicts the entity's performance in transferring the control of goods or services to the customer. In addition, the selected method should be applied consistently to similar performance obligations.[139]
The following requirements stated in IFRS 15.41 - .43 are provided to meet this objective:[140]

There are two types of methods to appropriately measure progress, namely input and output methods. When it comes to the determination of the appropriate method, the entity should consider the nature of the good or service promised to transfer to the customer.[141] When an entity chooses an output method, the revenue is recognized by directly measuring the value of the goods and services transferred to date. Hereby, milestones reached, units produced or further measures that indicate the progress of performance might be used to determine the revenue to

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[136] S. IFRS 15.36.
[137] Cf. GRANT THORNTON INTERNATIONAL LTD. (2016), Online source [24.01.2019], p. 10.
[138] S. IFRS 15.37.
[139] S. IFRS 15.40.
[140] S. IFRS 15.41-43.
[141] S. IFRS 15.41.

be recognized. Schurbohm-Ebneth and Viemann note that output-oriented methods might not be convenient for entities with large amounts of unfinished goods.[142] The performance of entities concerned will not be displayed until the unfinished goods have completed the production process or have been delivered. Consequently, progress cannot be adequately measured. In contrary, input methods recognize revenue based on the extent of inputs or efforts spent to satisfy a performance obligation compared to the total expected inputs or efforts needed. Therefore, costs incurred, machine hours used, labor hours expended, or resources consumed are used to measure the progress toward completion of a performance obligation.[143]

In the process of determining the progress toward completion, an entity must not include any goods or services for which the entity does not transfer control to a customer. That means that only goods or services are considered in the measure of progress that are transferred to a customer to satisfy the corresponding performance obligation.[144] The entity is encouraged to update its measure of progress to represent changes in the outcome of the performance obligation if circumstances should change over time. These changes will be reflected in the annual statement of accounts as a change in accounting estimate following IAS 8 – "Accounting Policies, Changes in Accounting Estimates and Errors".[145]

However, to account for the progress of completion as attributable revenue, the entity has to be able to determine the respective performance obligation's percentage of completion reasonably. In the early stage of a contract, it might not be able to determine the satisfaction of a performance obligation reasonably. In this case, the entity is permitted to recognize revenue to the extent of the costs incurred if it expects the costs to be recovered.[146]

3.3.5.2. **Performance obligations at a point in time**

All performance obligations that are not satisfied over a period, by implication are regarded as satisfied at a point in time. Consequently, an entity recognizes revenue by evaluating when the control of the asset is transferred to, respectively obtained by the customer. Besides the control principle outlined in paragraph one, the standard provides indicators of control:[147]

- The entity has a present right to receive payment for the asset.

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[142] Cf. SCHURBOHM-EBNETH/VIEMANN (2015), p. 187.
[143] Cf. GRANT THORNTON INTERNATIONAL LTD.(2016), Online source [24.01.2019], p. 10.
[144] S. IFRS 15.42.
[145] S. IFRS 15.43.
[146] S. IFRS 15.44.
[147] S. IFRS 15.38.

- The customer has a legal title to the asset. It is notable that title retentions by the entity to protect the entity in case of late payments do not prevent the transfer of control to the customer.
- The entity has transferred physical possession of the asset to the customer.
- The customer has significant risks and rewards of owning the asset.
- The customer has accepted the asset.

The following figure demonstrates the approach to determine whether control is transferred at a point in time or over time.

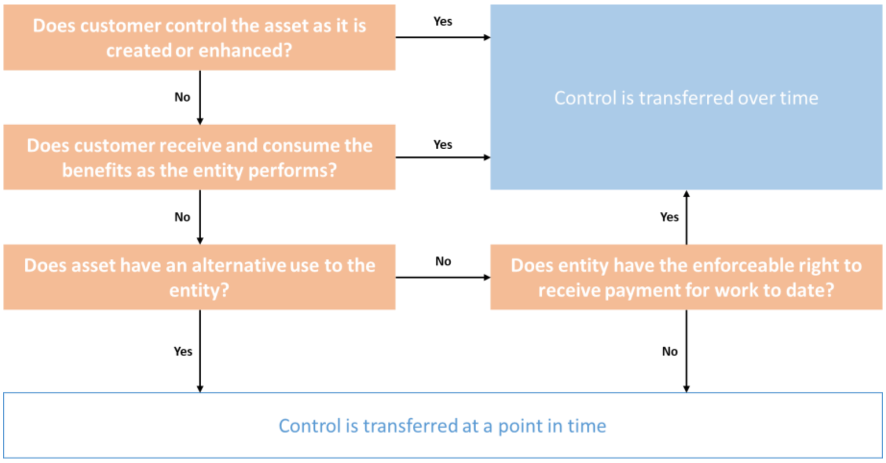

Figure 9: Determining the timing of transfer, Source: GRANT THORNTON INTERNATIONAL LTD. (2016), p. 10.

3.3.5.3. **Repurchase agreements**

In some cases an entity sells an asset, but also promises or has an option to repurchase the asset, an asset that is substantially the same or another asset which includes the initially sold asset (component).[148] The subsequent section is based on a publication of Grant Thornton International Ltd.[149]Three different options might be agreed on – a call, a put, or a forward. Thus, the entity needs to evaluate the form of the promise to repurchase the asset before it is able to account for the transaction. If the entity is obliged to repurchase an asset, the contract includes a forward. In contrast to a forward, a call represents the right to repurchase the asset but includes no duty. In the event of a forward or call option, the contract is accounted for as a lease, if an entity can or must repurchase the asset for an amount below the original selling price. In the event of a similar or exceeding amount, the contract is accounted for as a financing agreement. The opposite to a forward or call option will occur if the customer has the right to require the repurchase of an asset (put option) at a lower amount than the original selling price. At this point, the

[148] S. IFRS 15.B64.
[149] Cf. GRANT THORNTON INTERNATIONAL LTD. (2016), Online Source [24.01.2019], pp. 10.

entity needs to assess whether the customer has a significant economic incentive to exercise this right. One of the various factors is the relationship between the expected market value and the repurchase price at the repurchase date. A significant economic incentive prevails if the repurchase price significantly exceeds the market value. As a result, the contract would be accounted for as a lease.[150] Apart from a sale-leaseback transaction, this is due to the fact that the customer merely pays for a right to use the asset over a period of time. Shall the customer have no significant economic incentive the agreement is accounted for as a sale with a right of return. Similar to a forward or call option, a put option can lead to a financing agreement as well. This is true if the repurchase price equals or exceeds the original selling price and is above the expected market value of the asset. The entity continues to recognize the asset but recognizes a liability which is initially measured at the original selling price.[151] A so-called sale and leaseback transaction originates if the exercise price of the put option is lower than the original sales price and would be considered a financing transaction on hand that the holder has a significant economic incentive to exercise the option. Otherwise, it would be considered a lease.

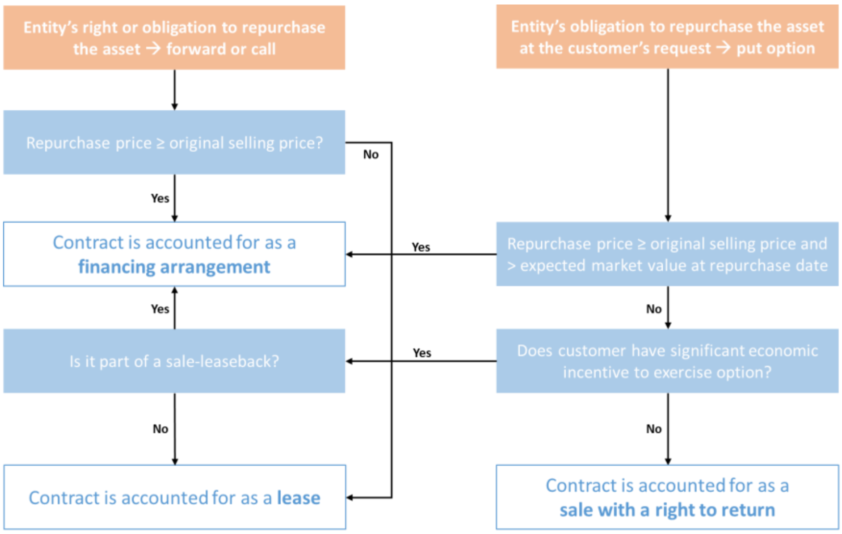

Figure 10: Repurchase agreements, Source: GRANT THORNTON INTERNATIONAL LTD. (2016), p. 16.

150 S. IFRS 15.B66-69.
151 S. IFRS 15.B70-74.

3.3.5.4. **Customer options for additional goods or services**

In addition to the sale of goods or services, an entity might offer an option to acquire further goods or services for free or at a discount. These include award credits or points, renewal options, sales incentives, or other discounts for prospective acquired goods or services.[152] According to IFRS 15.B40, such options are considered performance obligations if they represent a material right.[153] If a customer could receive a discount or a similar right without entering into a contract, the presence of material right is not given. Furthermore, a discount usually granted for those goods or services to that class of customers within a geographical area or market or an option to acquire the additional good or service reflecting the stand-alone selling price for that good or service fail to fulfill the prerequisites of the term material right. The latter represents a promotional offer and will only be considered under the new standard if the option is exercised.

However, if the customer option is a material right, the entity would allocate a part of the transaction price to that performance obligation based on the relative stand-alone selling price. Alternatively, the price has to be estimated if it cannot be directly observed. As part of the estimate, discounts the customer would receive without exercising the option, and the likelihood of the exercise of the option have to be factored in.[154] Revenue related to customer options will be recognized if the options are exercised or expire. IFRS 15.B43 offers a practical expedient usually applied to contract renewals.[155] The transaction price can be allocated to the optional goods or services.

3.3.5.5. **Comparison of Step V to previous provisions**

The transition of previous IFRS provisions to IFRS 15 covers a shift from the risk and reward approach to the transfer of control approach. While IAS 18 required the transfer of significant risks and rewards to the buyer to recognize revenue, IFRS 15 focuses on the transfer of control over goods and services to the customer.[156] Especially, revenues from construction contracts or the rendering of services have been accounted for under the percentage-of-completion method. Indeed, the new regulations concerning revenue recognition over time are consistent with those of IAS 11 but new additional criteria for the recognition over time have been introduced. This leads to a reassessment of an entity's' contracts recognized over time to verify whether the criteria for

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152 S. IFRS 15.B39.
153 S. IFRS 15.B40.
154 S. IFRS 15.B42.
155 S. IFRS 15.B43.
156 Cf. BDO IFR ADVISORY LIMITED (2019), Online source [15.02.2019], p. 156.

recognition over time is fulfilled or not. Consequently, a part of an entity's contracts previously accounted for under the percentage-of-completion method may now be recognized at contract completion or at the time goods or services have been transferred. By implication, various entities might initially apply the percentage-of-completion method. With regard to real estate arrangements previously regulated under IFRIC 15, it remains a challenge to determine when control of real estates is transferred to the customer, especially for multi-unit residential developments.

The legacy standards included no special application methods when determining the stage of completion. The methods to be used are consistent to those under IFRS 15, yet an entity is required to use a method that reliably measures the work performed.[157] The IASB emphasizes the importance of output-oriented methods as the value of goods and services transferred is measured. However, an input-oriented method shall be applied if it is cost-efficient and provides a reasonable basis for measuring progress. Additional guidance notes limitations for the use of output measures. This could be the case if an entity's performance has produced a significant material amount of work in progress or finished goods controlled by the customer.[158]

IAS 11 requires the immediate recognition of an expected excess as an expense if it is probable that the total contract costs might exceed the total contract revenue. Since IFRS 15 does not consider the accounting for losses in its guidance, IAS 37 is applicable in these cases to assess if the contract is onerous and to measure the provision.

[157] S. IAS 11.30.
[158] Cf. BDO IFR ADVISORY LIMITED (2019), Online source [15.02.2019], p. 156.

3.4. Licenses of intellectual property

Licenses give the customer the right to use the entity's intellectual property such as software and technology, motion pictures, music, franchises, patents, trademarks, and copyrights. If an entity grants a license to a customer, it either recognizes the resulting profits over time or at a point in time.[159] The timing depends on whether the licenses are separable of any other promises in the contract and the nature of the entity's performance under the license. First, it is evaluated if the commitment to grant a license cannot be separated from other promises, the license is not distinct and will be accounted for, together with the non-separable promises, the bundle of promises as a single performance obligation.[160]

If the license is distinct, the nature of the license – whether it is a right to use or a right to access – is assessed. The latter results in satisfaction over time and is given if the following criteria are met:[161]

- the contract either stipulates or the customer expects the entity to undertake activities resulting in a significant effect on the underlying intellectual property
- the customer is subject to positive or negative effects as a result of the activities undertaken
- through the undertaking of activities no good or service is transferred to the customer

If the criteria above are not fulfilled, the promise is a right to use intellectual property. The right to use exists when the license is granted, whereas the right to access exists throughout the license period.[162] Therefore, the performance obligation is satisfied at a point in time if the nature of the license is a right to use (comparable to a sale of a good). For the determination of a license's nature, it is irrelevant whether there are restrictions on time, geography, use, or guarantees that the entity possesses a valid patent for intellectual property. These are merely characteristics of the license granted.[163] Nardmann et al. note that if the customer is able to benefit from the license and determine the use of it as the underlying intellectual property does not change, the obligation is satisfied at a point in time.[164] In other cases, the intellectual property might change due to subsequent activities undertaken by the licensor. As it has not been clear whether these activities refer to the functionality, the form or significant changes in the value of intellectual property, the IASB has extended its application provisions through IFRS 15.B59A. The paragraph clearly states

159 S. IFRS 15.B56.
160 S. IFRS 15.B54.
161 S. IFRS 15.B58.
162 Cf. BARDENS/WALLEK (2016), p. 327.
163 S. IFRS 15.B62.
164 Cf. NARDMANN/GEBERTH/HAUSSMANN (2016), p. 324.

that all activities are considered. Therefore, activities that significantly change the form or functionality of intellectual property or lead to a dependence of the customer towards the benefit from the use of the license result in a right to access.[165]

3.5. Warranties

Principally, warranties cover material defects that already existed at the time of the transfer of control to the customer. Hence, warranties do not represent separable promises as they are required by law, so-called assurance-type warranties. As a result, the entity accounts for the warranty according to IAS 37 – “Provisions, Contingent Liabilities and Contingent Assets”. The estimated costs are accrued as a provision. If the customer can separately purchase a warranty, it is accounted as a performance obligation and known as a service-type warranty. As a prerequisite, the warranty has to provide additional service beyond the assurance that the product complies with the stipulated or agreed-upon characteristics. IFRS 15 knows several factors which indicate an additional service. A legal requirement would indicate that it is no separate obligation since the law intends to protect customers from the risk of buying a faulty product. Additionally, the coverage period can indicate whether it is a separate promise or not. The longer the period, the more likely it is a separable performance obligation. Finally, the nature of the tasks the entity promises to perform under warranty might also yield information. If an entity has to perform specific tasks such as the return delivery of a defective product to assure the agreed-upon specifications, it is not likely that a separate performance obligation is constituted.[166]

If a separate performance obligation can be determined, the entity allocates a portion of the transaction price to that warranty. The assurance-type warranty remains under the scope of IAS 17 (accrual of estimated costs). Should the entity fail to reasonably account for the assurance and service portions separately, it has to account for both as one single performance obligation.

3.6. Contract costs

The superseding standard specifies the accounting treatment for costs an entity incurs to fulfill or to obtain a contract to provide goods and services to a customer. The requirements discussed below will only be applied to costs incurred that refer to a contract with a customer within the scope of IFRS 15. Contract costs are initially recognized as an asset. These will be expensed on

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165 Cf. NARDMANN/GEBERTH/HAUSSMANN (2016), p. 324.
166 S. IFRS 15.B28-B33.

a systematic basis consistent with the transferal of goods or services promised to the customer to which the costs relate. Contract costs cover both incremental costs to obtain a contract as well as costs to fulfill a contract.[167]

3.6.1. Costs to obtain a contract

First, an entity has to consider the scoping provisions of the new standard. Therefore, the entity has to verify if the requirements on consideration payable to a customer under IFRS 15 apply to the costs. If that is the case, the incremental costs of obtaining a contract with a customer are recognized as an asset under the premise that the entity can recover them.[168] Costs can be recovered directly or indirectly. Contract acquisition costs might be recovered directly through reimbursement or indirectly through a margin inherent in the contract. By definition, incremental costs, only arise through obtaining a contract and would not have been incurred otherwise.[169] If the costs incurred do not specify as incremental costs they will be expensed as incurred. This does not apply for costs that are explicitly chargeable to the customer regardless of whether the contract is obtained.

The standard notes that sales commissions qualify as a type of an incremental cost leading to the recognition of an asset. A commission related to sales from contracts signed during the reporting period might represent incremental costs. However, the standard does not explicitly address considerations for different types of commissions which forces entities to judge if sales commissions are incremental costs and if so, when the costs would be capitalized.[170]

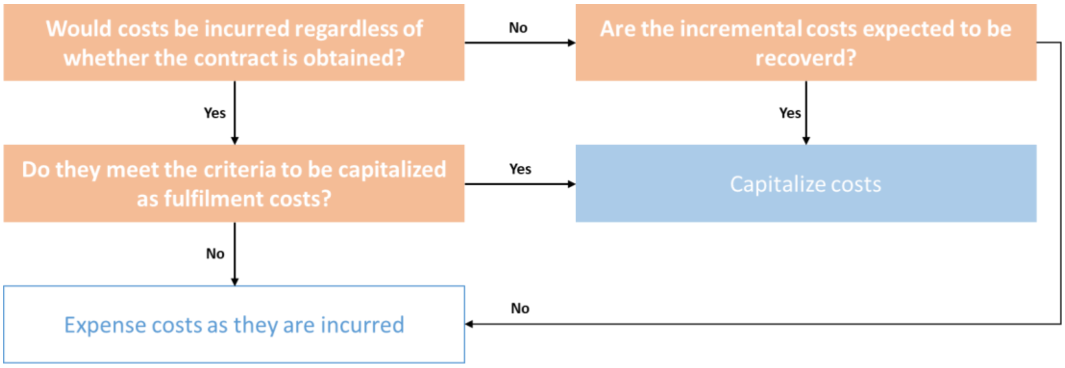

Figure 11: Costs to obtain a contract, Source: IPATOVA/O'DONOVAN/VOIGT/CANADY/MUNTER/SCHILB (2016), Online source [19.02.2019], p. 164.

[167] Cf. BDO IFR ADVISORY LIMITED (2019), Online source [15.02.2019], p. 80.
[168] Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], p. 274.
[169] Cf. BRÜCKS/EHRCKE/GROTE/PILHOFER (2017b), pp. 233.
[170] Cf. IPATOVA/O'DONOVAN/VOIGT/CANADY/MUNTER/SCHILB (2016), Online source [19.02.2019], p. 165.

As a practical expedient, an entity can choose to immediately expense contract acquisition costs when the asset would have been amortized within one year or less. Although it is not explicitly stated in the standard, Ernst & Young recommend applying this approach to all short-term contract acquisition costs.[171]

The following example should illustrate the requirements above. A consulting company won a competitive bid to provide consulting services to a new customer. The following costs were incurred to obtain the contract:

- Legal fees for Due Diligence	USD 12,000
- Travel costs to provide proposal	USD 30,000
- Commissions to sales employees	USD 15,000
- **Total amount**	**USD 57,000**

Since the legal fees and travel costs would have been incurred despite obtaining the contract, these costs will be expensed as incurred.[172] If they are within the scope of another standard, the provisions of the respective standard apply. According to IFRS 15.91, the entity will recognize an asset for the USD 15,000 incremental costs of obtaining the contract from the commission to sales employees.[173] These costs are expected to be recovered through future fees for consulting services and have been incurred due to obtaining a specific contract. Since the amortization of contract costs is consistent with the transfer of control, costs are either amortized at a point in time or over time.[174] If a service is provided over time, costs capitalized have to be amortized over time. The relevant time frame is based on the expected contract period and not on the minimum contract period.[175]

3.6.2. Costs to fulfil a contract

Similar to costs to obtain a contract, the standard divides contract fulfillment costs into two categories – costs that result in the recognition of an asset and costs that are expensed as incurred. It is notable that other applicable standards are considered first to determine the appropriate accounting treatment. That implies that other standards can preclude the capitalization of particular

[171] Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], p. 277.
[172] S. IFRS 15.93.
[173] S. IFRS 15.91.
[174] Cf. BRÜCKS/EHRCKE/GROTE/PILHOFER (2017b), p. 234.
[175] S. IFRS 15.99 iAw. IFRS 15.IE193.

costs so that an asset cannot be recognized under IFRS 15. If other standards are not applicable, IFRS 15 provides the following criteria for capitalization:[176]

- The costs relate directly to a contract
- The costs the entity bears generate or enhance resources which will be used to satisfy performance obligations in the future
- The entity expects to recover the costs

The first criterion includes direct labor, direct materials, costs that are explicitly chargeable to the customer, other costs the entity incurs due to entering into the contract as well as allocations that directly relate to the contract or contract activities.[177] An example would be contract management or supervision costs but also deprecation of tools and equipment used to fulfill the contract. All three criteria have to be met to capitalize these costs. The subsequent example illustrates the provisions. The IT Management Company enters into a contract with customer X to manage his online shop for the next three years. As a consideration, the company receives a monthly fee. Prior to providing the services, the company builds a platform to migrate and subsequently, test customer X's data. The platform is not considered as a separate performance obligation as it is not transferred to the customer. The costs to set up the platform are as follows:

- Design of the platform	USD 12,000
- Migration and testing of data	USD 75,000
- Hardware and software implementation	USD 98,000
- **Total amount**	**USD 185,000**

Although the costs relate mainly to activities to fulfill the contract, they do not transfer goods or services to the customer. The hardware is accounted for under guidance for property, plant and equipment in accordance with IAS 16 "Property, Plant and Equipment". The software component is treated according to IAS 38 "Intangible Assets". However, the design services and the testing are capitalized as an asset. As the services directly relate to the contract, generate resources that will be used to satisfy performance obligations in the future and the costs are expected to be recovered over the three year contract period.[178]

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176 S. IFRS 15.95.
177 S. IFRS 15.97; Cf. GRANT THORNTON INTERNATIONAL LTD (2016), Online source [26.01.2019], p. 13.
178 Cf. DELOITTE TOUCHE TOHMATSU LIMITED (2018), Online source [02.03.2019], p. 210.

3.6.3. Amortization of capitalized costs

Following the recognition of an asset for the costs to obtain or fulfill a contract, an entity systematically amortizes the asset in coherence with the pattern of transfer of the goods or services the asset refers to. This might include both existing contracts as well as anticipated contracts.[179] The latter relates goods or services to be provided in the course of a renewal of an existing contract. The following example illustrates the amortization under an anticipated contract. Company A concludes a contract with customer Z to manage its accounting for the next three years. For the initial setup company A incurs costs amounting to € 300,00. The setup activities do not transfer any goods or services to the customer. Due to a customer analysis and the historical experience, company A expects a contract renewal for an additional two years. Consequently, the setup costs are recognized as an asset and amortized over the five years of the contract. The amortization is performed on a systematic basis which represents the pattern of satisfaction of the performance obligation.

To conclude, the amortization of a capitalized contract cost asset is based on the transfer of goods or services to which the asset relates. Since there is no specific guidance on the method to use to amortize the asset, the expected timing of the transfer of the goods or services should be taken under consideration. The revenue recognized under the contract could be front-loaded, back-loaded, or seasonal. Therefore, costs related to that contract should be amortized accordingly.[180]

The standard notes that the goods or services might be provided under an anticipated contract that the entity can specifically identify. Since there is no detailed guidance on how to determine whether one or more anticipated contracts are specifically identifiable, the entity should consider the history with that customer class and predictive evidence through similar contracts. Ipatova et al. point out that an entity should also consider available information about the market for its goods or services.[181] The information should reach beyond the initial contract term since the demand for goods or services provided in the contract might not be in demand at the time the renewal is anticipated.[182]

In many cases, entities pay sales commissions on contracts executed with customers. This includes new contracts as well as renewals or extensions. Judgment on whether the original commission on the new contract should be amortized over the initial contract term or over a more

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[179] Cf. IPATOVA/O'DONOVAN/VOIGT/CANADY/MUNTER/SCHILB (2016), Online source [19.02.2019], p. 175.
[180] Cf. GROTE/HOLD/PILHOFER (2014b), p. 474.
[181] Cf. IPATOVA/O'DONOVAN/VOIGT/CANADY/MUNTER/SCHILB (2016), Online source [19.02.2019], p. 175.
[182] Cf. IPATOVA/O'DONOVAN/VOIGT/CANADY/MUNTER/SCHILB (2016), Online source [19.02.2019], p. 175.

extended period will be necessary if the salesperson receives an incremental commission for each renewal period.[183]

3.6.4. Impairment of capitalized costs

According to IFRS 15.101, an impairment loss has to be recognized in profit or loss if the carrying amount of an asset which has been capitalized due to its relevance of obtaining or fulfilling a contract exceeds the remaining amount of consideration that the entity expects to receive less any directly related costs (through the delivery of goods and services) yet to be recognized.[184] To determine the amount of consideration an entity expects to receive, the principles for determining the transaction price should be considered. The constraint on variable consideration has to be exempted. Furthermore, the amount needs to be adjusted to reflect the effects of the customer's credit risk, as noted in IFRS 15.102.[185]

Bohnefeld et al. heavily discuss the topic of construction contracts and its costs incurred.[186] The following paragraph is based on their findings. Until recently, IAS 11 regulated the area of construction contracts. Since IFRS 15 supersedes IAS 11, and no new specific provisions were added for the area of construction, construction contracts fulfilling the criteria of IFRS 15.5 and IFRS 15.9 are now treated according to IFRS 15 provisions. However, the IASB decided against a specific norm concerning the recognition of losses.[187] The so-called onerous test would have resulted in recognition of liabilities for single onerous performance obligations although the entire contract would have been profitable. Furthermore, several practical application difficulties were highlighted by respondents to the 2010 and 2011 Exposure Drafts as well. It has been stated by respondents that the onerous test has already been sufficiently covered by IAS 37.

Similar to the former standard, specialist literature consents to the full recognition of expected losses as soon as such loss is probable. According to IAS 11, an expected overall loss would have led to the transition from the percentage-of-completion-method to the zero-profit-margin-method. Nevertheless, Bohnefeld et al. suggest the impairment of capitalized contract assets and the recognition of a provision for onerous contracts.[188] The treatment is based on IFRS 15.101

183 Cf. DELOITTE TOUCHE TOHMATSU LIMITED (2018), Online source [02.03.2019], p. 213.
184 S. IFRS 15.101.
185 S. IFRS 15.102.
186 Cf. BOHNEFELD/EBELING/VITINIUS (2018), pp. 8.
187 S. IFRS 15.BC295.
188 Cf. BOHNEFELD/EBELING/VITINIUS (2018), p. 13.

and IFRS 15.103. Besides, IAS 37.69 requires an impairment prior to the recognition of a provision. Since there is no clarification on the part of the IASB which norm has to be referred to, no final statement can be made.

As a result, Bohnefeld et al. recommend the following accounting treatment.[189]

- Continuous realization of revenue in favor of the contract asset despite the identification of an onerous contract (no change in methods)
- Impairment of the contract asset according to IFRS 15.101, IFRS 15.103, respectively IAS 37.69
- If the impairment does not cover the expected loss, a provision for onerous contracts has to be recognized for the exceeding part according to IAS 37.5 and 37.66

[189] Cf. BOHNEFELD/EBELING/VITINIUS (2018), p. 14.

3.7. Effects on annual financial statements and disclosure requirements

3.7.1. Disclosure requirements under IAS 18 and IAS 11

As a part of the annual financial statements, the notes serve the purpose to explain the figures, as well as to provide additional information which exceeds the components of an annual financial statement. It shall give insight into the methods used and the origin of the figures. Although revenues are presented in the top line of a profit and loss statement and its significance as a key performance indicator, there have only been rudimental disclosure requirements. Waschbusch and Lam (2017) conducted an exemplary evaluation of DAX, MDAX, SDAX, and TecDAX listed companies.[190] They revealed that previously disclosed notes only fulfilled the minimum legal requirements. As a result, IFRS-reporting entities now face noticeable adaption requirements within their respective group reporting. The superseding standard enhances quantitative as well as qualitative disclosure requirements, especially improving revenue oriented disclosures focusing on entity specific notes. The following section is widely based on Waschbusch and Lam.[191]

With regard to previous disclosure requirements for revenue recognition IAS 18 includes the following:[192]

- Explanation of accounting methods used to account for revenue as well as methods to determine the percentage of completion or performance progress for services, respectively
- Statement of each significant category and its revenue figure recognized in the relevant reporting period (sale of goods and services, interest income, revenue from royalties and dividend earnings)
- Statement of revenue figures originating from barter transactions of goods or services, included in afore-noted categories

In addition, entities are required to disclose further information if they operate in the field of long-term contract manufacturing.[193] Besides revealing the amount of contract revenue recognized within the reporting period, the methods used to determine revenue as well as the methods used to determine the stage of completion of ongoing projects have to be included too. At the balance

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[190] Cf. WASCHBUSCH/LAM (2017), p. 193.
[191] Cf. WASCHBUSCH/LAM (2017), pp. 193.
[192] S. IAS18.35.
[193] S. IAS 11.39.

sheet date, the gross amount due from customers for contract work should be presented as an asset, whereas the gross amount due to customers should be shown as a liability.[194] The former is usually reported as a receivable or as a component of inventory, while the latter is reported as other liability.[195]

3.7.2. Disclosure requirements under IFRS 15

Users of financial statements shall be able to understand the turnover generated and the resulting cash flows through customer contracts in respect of its nature, amount, timing, and uncertainty.[196] To meet the objective, an entity should disclose qualitative as well as quantitative information about its contracts with customers, significant judgments and changes in the judgments to correspond with the standard and any assets recognized from the costs to obtain or fulfill a contract with a customer.[197] The entity can partially influence the level of detail. However, the disclosure objectives need to be satisfied, and useful information must not be obscured by an oversupply of insignificant details or by an aggregation of items with substantially different characteristics. Due to the extensive disclosure requirements, preparers raised concerns that the costs to provide the information might outweigh any potential benefits. Hence, the boards clarified that entities do not need to include disclosures irrelevant or not material to them. [198] The following paragraphs are broadly based on publications by Ernst & Young and Deloitte Tohmatsu Limited.[199]

3.7.2.1. **Contracts with customers**

The majority of disclosures refer to an entity's contracts with customers. The focus lays on the disaggregation of revenue, information about contract assets and liability balances, and an entity's performance obligations. Consequently, the amount of revenue recognized from contracts with customers has to be disclosed separately from other sources of revenue. Thus, an equipment manufacturer who sells and leases equipment would separate the respective amounts from these transactions. Besides, impairment losses from contracts with customers have to be disclosed separately from other impairment losses if they are not separately presented in the statement of comprehensive income. It is notable that, unless another standard requires or permits offsetting income and expenses within profit or loss or the statement of comprehensive income, IAS 1 –

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194 S. IAS 11.42.
195 Cf. WASCHBUSCH/LAM (2017), p. 194.
196 S. IFRS 15.111.
197 Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], p. 299.
198 Cf. DELOITTE TOHMATSU LIMITED (2018), Online source [02.03.2019], p. 222.
199 Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], pp. 299; DELOITTE TOHMATSU LIMITED (2018), Online source [02.03.2019], pp. 224.

"Presentation of Financial Statements" prohibits this approach.[200] In the course of determining the transaction price according to IFRS 15, the recognized revenue might include offsets as trade discounts given or rebates paid by the entity to its customers have been offset. As long as the substance of the transaction is presented and identifiable, IAS 1 allows to net any income with related expenses arising from the same transaction.[201]

3.7.2.2. Disaggregation of revenue

IFRS 15.114 commands that revenues recognized within a reporting period must be disaggregated to categories that clarify, how economic factors influence the nature, amount, timing, and uncertainty about revenue and cash flows. This obligation is valid for both an entity's interim and annual financial statement.[202]

As mentioned above, an entity is required to disclose any impairment losses recognized within the scope of IFRS 9 or IAS 39 on receivables or contract assets arising from contracts with customers separately. Until now, there are no requirements to further disaggregate these losses for uncollectible amounts.[203] Also, the standard does not further specify how revenue should be disaggregated. The application guidance suggests using appropriate categories, which depend on an entity's circumstances. In doing so, the entity should consider how it disaggregates revenue in financial reporting in general – e.g., for earnings releases, investor presentations, or other public filings.[204] IFRS 15.89 includes examples of categories that might be appropriate such as the type of a good or service, geographical region, or the market or type of customer.[205] The following graphic aims to illustrate a multi-dimensional categorization of turnover of an international corporation operating in two different segments. Revenues generated within the reporting period are assigned to geographic regions, main product and service lines and presented according to their respective timing of the transfer of goods or services.

[200] S. IAS 1.
[201] S. IAS 1.32.
[202] S. IFRS 15.114.
[203] Cf. WASCHBUSCH/LAM (2017), p. 197.
[204] S. IFRS 15.B88.
[205] S. IFRS 15.89.

Segments	Consumer products	Transport	Energy	Total
	CU	CU	CU	CU
Primary geographical markets				
North America	990	2 250	5 250	8 490
Europe	300	750	1 000	2 050
Asia	700	260		960
	1 990	3 260	6 250	11 500
Major goods/service lines				
Office Supplies	600			600
Appliances	990			990
Clothing	400			400
Motorcycles		500		500
Automobiles		2 760		2 760
Solar Panels			1 000	1 000
Power Plant			5 250	5 250
	1 990	3 260	6 250	11 500
Timing of revenue recognition				
Goods transferred at a point in time	1 990	3 260	1 000	6 250
Services transferred over time			5 250	5 250
	1 990	3 260	6 250	11 500

Figure 12: Disaggregation of revenue, Source: own.

Although IFRS 15.112 states that an entity providing disaggregated revenue disclosures as part of its segment disclosures according to IFRS 8 – "Operating Segments", Ernst & Young suggest, that the segment related disclosures might be insufficient in terms of IFRS 15.[206] This is why IFRS 15.115 requires IFRS preparers applying IFRS 8 to explain the relationship between the information about disaggregated revenue and the segment information.[207]

3.7.2.3. Contract balance

To help users of financial statements better understand the relationship between revenues recognized and the changes in contract balances the standard requires to disclose opening and closing balances of receivables, contract assets and contract liabilities from contracts with customers. Furthermore, an explanation (qualitative disclosure) of significant changes in the contract asset and liability balance during the reporting period is demanded. This aims to improve the estimation when a contract asset is re-designated to a receivable or an incoming payment, and

[206] Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], pp. 303.
[207] S. IFRS 15.115.

when a contract liability is recognized as a profit.[208] Particular attention should be paid to disclosures according to IFRS 15.116 regarding amounts presented as contract liabilities in the opening balance and the course of the reporting period being recognized as revenue. Since these liabilities contain received or due deposits and advance payments, a part of the current revenue originates from considerations of customers from previous periods. This pre-financed revenue - component needs to be presented separately as it is illustrated by the graphic below.[209] Besides, the amount of revenue recognized in the period that relates to amounts allocated to performance obligations satisfied or partially satisfied in previous periods needs to be disclosed as well. This information relates to subsequently recognized revenues originating from changes of initial assumptions or parameters that concern the transaction price. An example would be usage- or sales-based royalties an entity receives in the reporting period following to the period the usage of intellectual property was granted. The information is not required elsewhere in the financial statements but provides relevant information about the timing of revenue recognized, which is not a result of performance in the actual period.[210]

	2019	2018	2017
	CU	CU	CU
Receiveables from contracts with customers as of 31.12.	2 500	3 350	2 800
Contract asset	1 700	1 950	1 600
Contract liability	950	600	800
Revenue recognized in the period from:			
Amounts included in contract liability at the beginning of the period	450	550	400
Performance obligations satisfied in previous periods	180	325	250

Figure 13: Disclosure on contract assets and contract liabilities, Source: own.

3.7.2.4. **Performance obligations**

The legacy IFRS required entities to disclose accounting policies used for recognizing revenue. However, users of financial statements claimed that many entities provided a boilerplate description omitting the link between their policies and the contracts entered into with customers. As a result, IFRS 15 requires more descriptive information about an entity's performance obligations.

According to IFRS 15.120 the remaining performance obligations, the amount of the transaction price allocated to these obligations and estimation when the entity expects to recognize the respective revenues by using time bands should be included in the notes.[211] The aggregated

208 Cf. WASCHBUSCH/LAM (2017), p. 198.
209 Cf. GRANT THORNTON INTERNATIONAL LTD. (2016), Online source [24.01.2019], p. 18.
210 S. IFRS 15.BC347.
211 S. IFRS 15.120.

amount represents the already contractually agreed upon total amount as of the end of the reporting period not yet or partially unsatisfied performance obligations. Users of financial statements hereby gain information about expected revenues from existing contracts. However, the amount disclosed does not necessarily have to represent the actual order situation as there is a practical expedient. Unless the original expected contract duration does not exceed one year, the corresponding performance obligations can be disregarded.[212]

3.7.2.5. **Significant judgements**

Besides the mentioned disclosure requirements above, judgments and changes in judgments due to the application of the new standard that affect the determination of amount and timing of revenue recognition have to be disclosed as well. Although general requirements about the disclosure of significant accounting estimates and judgments exist under IFRS, the boards decided to require specific disclosures as well. This is due to the importance placed on revenue by users of financial statements. As a result, the requirements exceed those in the general requirements for significant judgments and accounting estimates within the scope of IAS 1.[213] In particular, those impacting the timing of the satisfaction of performance obligations, the transaction price, and amounts allocated to performance obligations.[214] Since performance obligations can be satisfied over time or at a point in time, different requirements for the notes exist. In the case of the former, an entity describes the method used to recognize revenue.[215] Allen et al. allege a description of the output or input method and the application of these methods as an example.[216] Furthermore, it should be argued why the methods used represent a faithful picture of the transfer of goods or services. For the latter, the standard requires the disclosure about significant judgments that were made to assess whether a customer obtains control over the promised goods or services promised.[217]

Information about various influencing variables needs to be provided to ensure that the user of financial statements understands the amounts disclosed. Therefore an entity is required to give an insight on the methods, inputs, and assumptions used to determine and allocate the transaction price and to measure obligations for returns or refunds and other similar obligations.[218] As already discussed in detail in section 3.3.3, the determination of the transaction price includes the estimation and constraint assessment of variable consideration, the adjustment of the consideration if a significant financing component exists and the measurement of non-cash consideration.

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212 S. IFRS 15.121; Cf. WASCHBUSCH/LAM (2017), p. 198.
213 S. IAS 1.122 – 1.133.
214 Cf. ALLEN/KALAVACHERLA/MUNTER/O'DONOVAN/SCHURBOHM (2016), Online source [19.02.2019], p. 315.
215 S. IFRS 15.124.
216 Cf. ALLEN/KALAVACHERLA/MUNTER/O'DONOVAN/SCHURBOHM (2016), Online source [19.02.2019], p. 315.
217 S. IFRS 15.125.
218 Cf. GRANT THORNTON INTERNATIONAL LTD. (2016), Online Source [24.01.2019], p. 18.

Concerning the allocation of the transaction price, section 3.3.4 considered the estimation of the stand-alone selling prices of promised goods or services and the allocation of discounts and variable consideration. All these factors need to be disclosed in the notes.

3.7.2.6. **Assets recognized from the costs to obtain or fulfill a contract**

There are explicit provisions referring to the accounting for costs, an entity bears in order to fulfill and obtain a contract to provide goods or services to its customers. Here, too, information about the assets recognized is required to enable the users to grasp the different types of costs recognized as assets and how they are amortized or impaired.[219] First, IFRS 15.127 requires quantitative explanations describing the judgments made in determining the number of costs incurred that meet the criteria for capitalization.[220] This might include the assessment on whether costs can be directly allocated or their ability to amortize. Moreover, the method used to determine the amortization shall be described. Second, IFRS 15.128 requires the disclosure of closing balances of assets recognized from the costs incurred by main categories.[221] These categories might include costs to obtain contracts with customers, pre-contract costs, or setup costs. Further, the total amount of amortization and impairment losses recognized in the reporting period have to be cited.

Section 3.6 already noted that the expectation of recovering costs incurred through revenues generated in the future represents a central prerequisite for capitalization. If an entity has a valid expectation that it will be able to enforce its rights for only a portion of the contract price, losses of sales might be the consequence. Therefore, impairments point towards future losses since once capitalized contract costs might not be (fully) covered by future revenues. Waschbusch and Lam suggest the disclosure of information about the causal factors (e.g., defaults or del credere) to improve the transparency of revenues.[222] Nevertheless, information about losses due to impairments are not compulsory under IFRS 15.

In general, costs to obtain a contract are capitalized in a separate position in the balance sheet. Brücks et al. elaborate on the presentation of capitalized costs in great detail. Hence, the following section is widely based on their findings.[223] Due to rather nonspecific regulations, the authors either recommend the recognition as an intangible asset according to IAS 38 or a separate recognition as a balance sheet item, sui generis. Since the structure of an IFRS balance sheet is based on its items' maturities, capitalized costs amortized over time have to be disclosed as long term

[219] Cf. WASCHBUSCH/LAM (2017), p. 199.
[220] S. IFRS 15.127.
[221] S. IFRS 15.128.
[222] Cf. WASCHBUSCH/LAM (2017), p. 199.
[223] Cf. BRÜCKS/EHRCKE/GROTE/PILHOFER (2017b), p. 234.

assets at the time of capitalization.[224] Even if the remaining contract period is less then twelve months at the reporting date, no reclassification as a short term asset takes place. Consequently, an entity could waive the classification as a short or long term asset. This only refers to capitalized costs recognized as intangible assets. However, the standards lack guidance regarding the reclassification of balance sheet items sui generis. This is also true for the presentation of depreciation and amortization. Through the unspecific norms, the prevailing scope of discretion leads to a limited cross-company comparison. Still, the presentation of depreciation or amortization in the income statement should correlate with the presentation of capitalized costs in the balance sheet. If the costs have been recognized as an intangible asset, expenses will be recognized as amortization. If the costs have been recognized as a balance sheet item sui generis, expenses are recognized as operating expenses such as distribution expenses. In contrast to costs to obtain a contract, the authors negate the capitalization of costs to fulfill a contract due to its operative character.

[224] S. IAS 1.60.

4. ANALYSIS OF CUSTOMER CONTRACTS

The subsequent section focuses on the analysis of contracts with customers. The contracts in the telecommunications industry will be analyzed according to IFRS 15 and IAS 18 and include the new disclosure requirements. The contract analyzed in the IT industry focuses on the comparison between IAS 18 and IFRS 15, whereas the contracts in the automobile and health care industry examine the new standard in more detail.

4.1. Telecommunications Industry

In order for companies operating in the telecommunications industry to remain competitive, the underlying business model had to change. Nowadays, diverse performance bundles are offered to customers. These include services such as telephony, text messaging services or data communication and devices such as cell phones, routers and similar. Due to their interdependence, services are often sold in combination with (mobile) devices. Since the purchase of a single device might be too expensive and act as a barrier to entry, companies try to create an incentive to buy their products by selling below market prices. The customer receives a device as well as a fitting service component for a monthly fee. The minimum contract duration usually amounts to several months up to one or two years. These contracts are called multiple-element arrangements and will be illustrated in the following two examples.

4.1.1. Combination of Contracts

In January 2018 an entity operating in the telecommunications industry enters into a so-called digital subscriber line (DSL) contract “International30” with 20.000 customers. It has to be noted that the contracts were not entered into at the same date but throughout the month of January. The following terms were agreed upon in the contract:

- Minimum contract duration of six months
- The contract can be called from both sides after the minimum contract duration
- Monthly base fee (flat rate for telephony and internet) amounting to € 39,00
- The entity disposes a router at contract inception against consideration of € 100,00 (conveyance of civil property)

In this case, multiple contracts exist with similar content. Therefore, the question arises when and how the portfolio approach under IFRS 15.4 can be applied to the scenario described above.[225] Furthermore, it will be examined how the revenue recognition within the new standard might be applied and which differences could occur with regard to legacy standards.

First, it has to be verified that a contract, according to IFRS 15.9, is on hand.[226] The parties included – the entity and its' customers – have approved and are committed to performing their obligations. Further, the rights of each party concerning the goods and services to be transferred can be identified. The underlying payment terms have been stipulated as well, and commercial substance is given. There has been no information that contradicts the probable collection of the consideration. As a result, the contracts meet the criteria of IFRS 15.9.

In principle, the new standard has to be applied to each contract with a customer individually. Due to practicability IFRS 15.4 explicitly allows the application of a portfolio of contracts with similar characteristics.[227] As a prerequisite, the result shall not significantly deviate from an application at an individual contract basis. Despite the number of contracts, there will only be one portfolio since identical characteristics are present throughout the contracts. It is irrelevant whether the contracts are concluded on the same day or over time, as long as it occurred within an identical period.

Since these contracts include a service component – telephony and internet – as well as a hardware component – router – it has to be verified if there are two separate performance obligations on hand. According to IFRS 15.22, the router and the service telephony and internet qualify for a separate performance obligation.[228] A router can be used independently and fulfills the definition of being distinct since there has not been a significant adaption required by the customer to the hardware component. Furthermore, there is no dependency on another performance obligation.[229]

Next, the transaction price has to be determined. As the contract period includes a minimum of six months, the service component has to be charged for the minimum period. In addition, € 50,00 will be on top of the service charge resulting in an amount of € 284,00. According to IFRS 15.74, the allocation has to be made based on relative stand-alone selling prices.[230] In the course of

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[225] S. IFRS 15.4.
[226] S. IFRS 15.9.
[227] S IFRS 15.4.
[228] S. IFRS 15.22.
[229] S. IFRS 15.27(a); IFRS 15.27(b).
[230] S. IFRS 15.74.

determining the stand-alone selling price, the standard suggests to use the price claimed by the entity if the good or service would have been sold on a separate basis.[231] Therefore, the service component is compared to its price charged if sold separately (catalog price). It is found that the price of € 39,00 represents an SSP for similar products with comparable characteristics. Here, data volume and anytime minutes would further suit as comparison factors if the company decides to compare its prices to those of competitors to examine the relevant SSPs. The same procedure applies to the router. The company has to evaluate at which price the device is sold individually. Alternatively, the router can be easily assessed, because it is a known product available to sale at different stores or online. The SSP for the router amounts to € 100,00. Since the sum of stand-alone selling prices of multi-component arrangements will regularly exceed the total transaction price, a proportionate allocation has to be performed. Thus, the total amount of stand-alone selling prices is determined, and each separate stand-alone selling price is set in proportion to that amount. The following table shows both the calculation of allocation factors on an individual contract basis and for all 20 000 contracts.

Product	Selling price	Amount	Transaction Price	SSP	Allocation Factor	Allocated amount
Flatrate Telephony & Internet	39,00	6	234,00	234,00	0,701	198,97
Router	50,00	1	50,00	100,00	0,299	85,03
Amounts/Contract			284,00	334,00	**1**	**284,00**

Product	Contracts	∑ SSP	∑ TP	Allocated amount	Adjustment Δ (Accounting - Billing)
Flatrate Telephony & Internet	20 000	4 680 000,00	4 680 000,00	3 979 401,20	- 700 598,80
Router	20 000	2 000 000,00	1 000 000,00	1 700 598,80	700 598,80
Total		6 680 000,00	5 680 000,00	**5 680 000,00**	-

Table 3: Combination of Contracts - Determination of rel. SSPs – telecommunications industry – 4.1.1., Source: own.

As a result, € 198,97 are allocated to the service component, and € 85,03 are allocated to the router. The routers will be transferred to the customers at contract inception. Therefore, the revenue recognition takes place at a point in time, namely at contract inception. Since the router's allocated amount is higher than the corresponding transaction price, a contract asset will be capitalized, and additional revenue of € 700 598,80 has to be recognized. The service component will be available during the contract period and leads to revenue recognition over time. Since the transaction price for telephony and internet is higher than the actual allocated amount, revenue will be corrected by € 116 766,47 per month. In doing so, the contract asset will be continuously reduced (amortized) by the same amount until the end of the contract term.

231 S. IFRS 15.77.

To sum up, the following revenues will be recognized:

Revenue under IFRS 15	Recognition	January	February	March	April	May	June	Total
Router	Point in time	1 700 598,80						1 700 598,80
Telephony & Internet	Over time	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	4 680 000,00
Revenue adaption		- 116 766,47	- 116 766,47	- 116 766,47	- 116 766,47	- 116 766,47	- 116 766,47	- 700 598,80
Total		2 363 832,34	663 233,53	663 233,53	663 233,53	663 233,53	663 233,53	5 680 000,00

		31. January	28. February	31. March	30. April	31. May	30. June	Total
Contract asset as of		583 832,34	467 065,87	350 299,40	233 532,93	116 766,47	-	

Table 4: Revenue recognition under IFRS 15 – telecommunications industry - 4.1.1., Source: own.

Under IAS 18, revenue is measured at the fair value of the consideration received or receivable.[232] The recognition depends on two criteria – the probability that future economic benefit will flow to the entity, and the amount of revenue can be measured reliably.[233] The router identifies as a sale of good, whereas the telephony and internet component meets the definition of a service.

According to IAS 18.14, the following criteria must be satisfied to recognize revenue from a sale of good:[234]

- The seller transfers all significant risks and rewards of ownership to the buyer
- The seller has no continuing managerial involvement or effective control over the goods sold that would usually be associated with ownership
- The amount of revenue can be measured reliably
- It is probable that the future economic benefit will flow to the seller
- The costs incurred can be measured reliably

The routers are transferred to the customers at a point in time with all significant risks and rewards. The entity has no control over the goods sold. As a consideration € 1 000 000,00 have been received, which represents the future economic benefits.

IAS 18.20 states similar criteria to recognize revenue when a service is rendered.[235]

- The amount of revenue can be measured reliably
- It is probable that the future economic benefit will flow to the seller
- The stage of completion can be measured reliably at the balance sheet date
- The costs incurred for the transaction and those to complete the transaction can be measured reliably

[232] S. IAS 18.9.
[233] S. IAS 18.18; IAS 18.22.
[234] S. IAS 18.14.
[235] S. 18.20.

The service is provided over time and leads to a monthly revenue of € 780 000,00. The future economic benefit is probable, and the stage of completion can be measured reliably. This is because of the fixed monthly fee and the contract period.

Revenue under IFRS 15	Recognition	January	February	March	April	May	June	Total
Router	Point in time	1 700 598,80						1 700 598,80
Telephony & Internet	Over time	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	4 680 000,00
Revenue adaption		- 116 766,47	- 116 766,47	- 116 766,47	- 116 766,47	- 116 766,47	- 116 766,47	- 700 598,80
Total		2 363 832,34	663 233,53	663 233,53	663 233,53	663 233,53	663 233,53	5 680 000,00
		31. January	**28. February**	**31. March**	**30. April**	**31. May**	**30. June**	**Total**
Contract asset as of		583 832,34	467 065,87	350 299,40	233 532,93	116 766,47	-	

Revenue under IAS 18	January	February	March	April	May	June	Total
Router	1 000 000,00						1 000 000,00
Telephony & Internet	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	4 680 000,00
Total	1 780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	5 680 000,00
IFRS 15 vs. IAS 18	583 832,34	- 116 766,47	- 116 766,47	- 116 766,47	- 116 766,47	- 116 766,47	

Table 5: Revenue recognition - comparison IFRS 15 vs. IAS 18 – telecommunications industry – 4.1.1., Source: own.

As a result, revenues recognized under IFRS 15 and IAS 18 diverge. While the entity had to recognize € 1 700 598,80 for the routers in January under IFRS 15, IAS 18 required the display of revenue amounting to € 1 000 000,00. This is due to the new provisions of IFRS 15, requiring the entity to allocate the revenue according to the relative stand-alone selling prices of the underlying performance obligations. Hence, IFRS 15 recognizes more profit in January and less profit in the subsequent months compared to IAS 18.

The following table summarizes the effects for the balance sheet, income statement, and cash flow statement. The contract asset is amortized within six months. The total revenue of € 5 680 000,00 is recognized until the end of June, and the cash flow statement displays the cash streams generated within that period.

Performance obligation	Revenue recognition						Total
	January	February	March	April	May	June	
Statement of Fin. Pos.							**-**
Contract Asset	583 832,34	467 065,87	350 299,40	233 532,93	116 766,47	- 0,00	
Income statement	**2 363 832,34**	**663 233,53**	**663 233,53**	**663 233,53**	**663 233,53**	**663 233,53**	**5 680 000,00**
Router	1 700 598,80						1 700 598,80
Telephony & Internet	663 233,53	663 233,53	663 233,53	663 233,53	663 233,53	663 233,53	3 979 401,20
Cashflow statement							**5 680 000,00**
Payments	1 780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	5 680 000,00

Table 6: Impact on components of annual statement of accounts – telecommunications industry – 4.1.1., Source: referring to BARDENS/WALLEK (2016), p. 331.

The new disclosure provisions require the allocation of revenues to categories. Thus, users of financial statements are enabled to infer the type, the amount, and the timing of the revenue.[236] Due to the specific guidance that exceeds the provisions for segment reporting under IFRS 8,

236 S. IFRS 15.114.

IFRS 15.115 requires a transition from the categories applied under IFRS 15.114 to the revenues in the segment reporting.[237] A possible presentation can be found below.

Category	Segment		
	Austria	Slovenia	Croatia
	EUR	EUR	EUR
Segment Revenue			
hereof Inter-Segment-Revenue			
hereof Leasing			
Segment Revenue from contracts with customers	5 680 000,00		
Major goods/service lines			
Mobile communications	5 680 000,00		
Landline			
	5 680 000,00	-	-
Timing of revenue recognition			
Goods transferred at a point in time	1 700 598,80		
Services transferred over time	3 979 401,20		
	5 680 000,00	-	-

Table 7: Disclosure requirements under IFRS 15 – telecommunications industry – 4.1.1., Source: referring to BARDENS/WALLEK (2016), p. 331.

237 S. IFRS 15.115; IFRS 15.114.

4.1.2. Financing Component

The entity operates in the telecommunications industry and offers plans (cell phone contracts) in combination with cell phones. In the course of its ordinary business, it concludes an agreement with customer X in January 2018. The plan has a minimum contract period of two years and includes the latest iPhone and a monthly base fee of € 35,99 which includes telephony and internet. There is no additional payment for the iPhone, and the customer receives the phone at contract inception.

The example poses various questions. Is there a significant financing component? If so, how is it considered in the revenue? Is there an obligation to consider the financing component?

First, it has to be verified if a contract with a customer exists. Both parties to the contract have approved and are committed to performing their obligations. Further, the rights of each party concerning the goods and services to be transferred can be identified. The entity receives consideration for providing a cell phone and a service which contains data volume, anytime minutes, and text messages. The contract period has been agreed upon to be two years. The customer will pay a monthly fee of € 35,99, and a commercial substance is given as well since the entity generates revenue through its ordinary business activities (its primary income is based on this type of contracts). As the last checkpoint, the consideration has to be probable, which can be affirmed. Therefore, a contract by IFRS 15.9 is concluded.

Second, the contract needs to be analyzed to assess whether there are multiple performance obligations or if the contract components will be summarized as they cannot be separated. The contract includes two possible performance obligations – a service component and a hardware component. To qualify as a distinct performance obligation, the customer has to be able to benefit either alone or with other readily available resources from the good or service promised, and the good or service can be separately identified. The cell phone can be included in a plan but does not necessarily have to be and is a separate component since the model could be chosen independently from the tariff plan. Since there is no significant integration service provided, nor customization or modification or dependency to the service component, both criteria are fulfilled. As a result, the cell phone is a separate performance obligation. The same step has to be repeated for the service component. If the customer only buys the service component because he or she already has a cell phone, the service component can still be used for the existing phone. Hence, the customer can benefit from other readily available resources. Similar to the cell phone, there is no significant integration service provided, no customization or modification on hand, nor a

dependency to the cell phone. Thus, the service component 'telephony and internet' represents a separate performance obligation.
Third, the transaction price has to be determined. It is stipulated in the contract that the customer has to pay a monthly fee of € 35,99 for the service 'telephony and internet' resulting in a total amount of € 863,76. However, there is no additional payment included for the cell phone, which suggests a financing component in the contract. A financing component might be on hand if the expected length of time between the transferal of promised goods or services to the customer and the time the customer pays for those goods or services fall apart.[238] This could be true for the subsidized cell phone as the consideration is performed over 24 months after the delivery of the cell phone. There are two practical expedients which would allow disregarding a financing component due to a lack of materiality. If the time between the transferal of goods or services and the time of payment is less than one year or the financing component itself is negligible due to its small amount, no financing component is considered.[239] Especially the first expedient allows room for discussions because the imputed method of redemption might have an impact on the time span between the time of transfer and time of payment. In case the monthly customer payments are entirely allocated to the cell phone until the cell phone is redeemed, the method would represent a chronological redemption. That means that components that are transferred first will be redeemed first. In this case, the cell phone is transferred at contract inception. Therefore, the service component will be redeemed following to the hardware component. This could lead to the effect that the span between the time of transferal and the time of (complete) payment is less than one year, resulting in no consideration of a financing component. However, if it is assumed that each component is redeemed proportionately, the time span might exceed one year. Brücks et al. prompt the question of whether the application of a chronological redemption is possible without an explicit provision in the contract.[240]

Meanwhile, a mandatory consideration of a financing component in the telecommunications industry might frequently fail due to its quantitative materiality. Due to the assessment on an individual contract basis, there is only limited relevance in practice.[241]

Fourth, the allocation of the transaction price takes place. This is based on relative stand-alone selling prices. As described in section 3.3.4, the standard suggests to use the price claimed by the entity if the good or service would have been sold on a separate basis. Consequently, the

[238] S. IFRS 15.60 - .62.
[239] S. IFRS 15.63; IAS 1.7.
[240] Cf. BRÜCKS/EHRCKE/GROTE/PILHOFER (2017a), p. 184.
[241] S. IFRS 15.BC234; Cf. ERNST & YOUNG GLOBAL LIMITED (2017), Online source [26.01.2019], p. 142.

catalog price for the iPhone is applied. In this case, the cell phone has a SSP amounting to € 499,00. The cell phone contract would have been offered for the same amount if sold separately.

Lastly, the satisfaction of performance obligations has to be verified. Table 8 illustrates the composition of the revenue without a financing component. Although no payment is made for the cell phone, the entity has to recognize a profit of € 316,28 for the cell phone. Further, a contract asset has to be capitalized in the same amount, which is monthly reduced by € 13,18 (€ 316,28 divided by the contract period in months) until the contract expires. The service component is recognized monthly, resulting in a profit of € 22,82 (€ 547,48 divided by the contract period in months).

Product	List Price	Amount	Transaction Price	SSP	Allocation Factor	Allocated amount	Adjustment Δ (Accounting - Billing)
Cell Phone	0,00	1	-	499,00	0,366	316,28	316,28
Flat rate Telephony & Internet	35,99	24	863,76	863,76	0,634	547,48	-316,28
Total			863,76	1 362,76	**1**	**863,76**	-

Table 8: Revenue recognition without a financing component – telecommunications industry – 4.1.2., Source: own.

Table 9 summarizes the revenues generated and the capitalized contract asset per year.

Revenue under IFRS 15	Recognition	2018	2019	Total
Cell Phone	Point in time	316,28		316,28
Telephony & Internet	Over time	431,88	431,88	863,76
Revenue adaption		-158,14	-158,14	-316,28
Total		590,02	273,74	863,76
		31.12.2018	**31.12.2019**	**Total**
Contract asset as of		158,14	-	

Table 9: Revenue recognition in 2018 and 2019 – telecommunications industry – 4.1.2., Source: own.

Although there might be no obligation to consider a financing component, the following section covers the handling of a such. Table 8 shows that based on the relative SSPs, the cell phone allocates 36,6% of the transaction price. Since the monthly payment amounts to € 35,99, € 13,18 can be allocated to the hardware component. If this amount is regarded as a monthly payment in arrears, the cash value of € 300,39 would be calculated by applying the effective interest rate method. The applied rate has to represent an interest- and risk-adequate interest rate. Hence, an interest rate of 5 percent has been assumed.

Scenario 1	List Price	Amount	Transaction Price	Annuity	Cash Value
hereof Cell Phone	13,18	24	316,28	13,18	300,39
hereof Flat rate Telefony & Int.	22,81	24	547,48	22,81	547,48
Total	35,99		863,76		847,87

Table 10: Determination of cash value – telecommunications industry – 4.1.2., Source: own.

Table 10 shows that the actual cash value of the cell phone and the cell phone contract amount to € 300,39 and € 547,48, respectively. The difference between the transaction price and the cash value will be interest income resulting in an amount of € 15,89 (€ 11,69 in X0, € 4,20 in X1). Table 11 visualizes the interest income over time. The total amount of interests only represents 1,8 percent of the transaction price (€ 15,89 divided by the total transaction price of € 863,76). On an individual contract basis, the financing component would be evaluated as insignificant.

M	Amount	Annuity	Interests	Retirement	Remaining	
1	300,39	-€ 13,18	1,25	-€ 11,93	288,46	
2	288,46	-€ 13,18	1,20	-€ 11,98	276,48	
3	276,48	-€ 13,18	1,15	-€ 12,03	264,46	
4	264,46	-€ 13,18	1,10	-€ 12,08	252,38	
5	252,38	-€ 13,18	1,05	-€ 12,13	240,25	
6	240,25	-€ 13,18	1,00	-€ 12,18	228,08	
7	228,08	-€ 13,18	0,95	-€ 12,23	215,85	
8	215,85	-€ 13,18	0,90	-€ 12,28	203,57	
9	203,57	-€ 13,18	0,85	-€ 12,33	191,24	
10	191,24	-€ 13,18	0,80	-€ 12,38	178,86	
11	178,86	-€ 13,18	0,75	-€ 12,43	166,42	
12	166,42	-€ 13,18	0,69	-€ 12,48	153,94	11,69
13	153,94	-€ 13,18	0,64	-€ 12,54	141,40	
14	141,40	-€ 13,18	0,59	-€ 12,59	128,81	
15	128,81	-€ 13,18	0,54	-€ 12,64	116,17	
16	116,17	-€ 13,18	0,48	-€ 12,69	103,48	
17	103,48	-€ 13,18	0,43	-€ 12,75	90,73	
18	90,73	-€ 13,18	0,38	-€ 12,80	77,93	
19	77,93	-€ 13,18	0,32	-€ 12,85	65,08	
20	65,08	-€ 13,18	0,27	-€ 12,91	52,17	
21	52,17	-€ 13,18	0,22	-€ 12,96	39,21	
22	39,21	-€ 13,18	0,16	-€ 13,02	26,19	
23	26,19	-€ 13,18	0,11	-€ 13,07	13,12	
24	13,12	-€ 13,18	0,05	-€ 13,12	0,00	4,20

Table 11: Allocation of a finance component - Amortization schedule – telecommunications industry – 4.1.2., Source: own.

Nevertheless, the entity could opt to consider a financing component voluntarily. Referring to the allocation of interests – shall the interests be allocated to the hardware component only or proportionately to both, hardware and software component -, IFRS 15 does not include any normative provisions. As a consequence, Brücks et al. suggest that the financing component can either be allocated to the subsidized hardware component only, illustrated by Table 12 or allocated to both, service and hardware component, visualized in Table 13.[242] The calculated SSPs above are adapted by the interest portion. The first case assumes that the interest income only concerns the cell phone. Hence, the allocated amount for the cell phone is reduced by the total amount of interest income resulting in revenue for the cell phone of € 300,39 in 2018. The interest income of 2018 and 2019 amounts to € 11,69 and € 4,20, respectively.

Financing component allocated to hardware component

Product	Alloc. Amount old	Alloc. Amount new	Allocation factor	Interest income	hereof t1	hereof t2
Cell Phone	316,28	300,39	0,354	15,89	11,69	4,20
Flat rate Telefony & Internet	547,48	547,48	0,646	0,00		
Total	863,76	847,87		15,89	11,69	4,20

Table 12: Allocation of a finance component - Alternative I – telecommunications industry – 4.1.2., Source: referring to BRÜCKS/EHRCKE/GROTE/PILHOFER (2017a), p. 184.

[242] Cf. BRÜCKS/EHRCKE/GROTE/PILHOFER (2017a), p. 184.

The second case suggests to allocate the interest income proportionately to the performance obligations. Therefore, both allocated amounts change and lead to revenue for the cell phone of € 310,46 in 2018. The interest income of 2018 and 2019 remain the same.

Financing component allocated to service and hardware component

Product	Alloc. Amount old	Alloc. Amount new	Allocation factor	Interest income	Allocation of interest income
Cell Phone	316,28	310,46	0,37	15,89	5,82
Flat rate Telefony & Internet	547,48	537,40	0,63	0,00	10,07
Total	863,76	847,87	1,00	15,89	15,89

Table 13: Allocation of a finance component - Alternative II – telecommunications industry – 4.1.2., Source: referring to BRÜCKS/EHRCKE/GROTE/PILHOFER (2017a), p. 184.

To summarize, it can be concluded that the allocation of interests could have a significant impact on the revenue recognized within a reporting period. The example above showcases a difference of 3,35 percent, which might be material if a company enters into multiple contracts of this type. The interest rate applied does have a significant impact on the result and should not be neglected as a factor. However, it remains a management decision which allocation approach will be chosen. In terms of IAS 1.122, it is an arbitrary decision and should be based on an entity's aims of the accounting policy.

Even though the financing component might be material at a portfolio level, the boards clarified in its' Basis for Conclusion that an entity should consider only the significance of a financing component at a contract level.[243] As a result, some financing components will not be identified as significant, although they might be as a whole for a portfolio of similar contracts. Hence, the comparison between IFRS 15 and IAS 18 of the underlying contract does not consider any financing components as it is not material.

Similar to case 4.1.1, IAS 18 requires to apply the recognition criteria of IAS 18.14 and IAS 18.20 to the separately identifiable components within the underlying transaction.[244] Yet, IAS 18 provides no guidance on how to identify the components or allocate the selling price. Since the service component and the hardware component can be clearly separated, two distinct performance obligations can be identified.

Under IAS 18, the entity would recognize revenue from the sale of the monthly plan amounting to € 431,88 (€ 35,99 x 12). The cell phone, however, would have generated no revenue. Instead, the cell phone would have been treated as the cost of acquiring the customer. The new standard

[243] S. IFRS 15.BC234.
[244] S. IAS 18.14; IAS 18.20.

requires the allocation of revenue to the service as well as to the hardware component. This leads to a higher revenue under IFRS 15 in 2018 and to lower revenue in 2019.

Revenue under IFRS 15	Recognition	2018	2019	Total
Cell Phone	Point in time	316,28		316,28
Telephony & Internet	Over time	431,88	431,88	863,76
Revenue adaption		- 158,14	- 158,14	- 316,28
Total		590,02	273,74	863,76

	31.12.2018	31.12.2019	Total
Contract asset as of	158,14	-	

Revenue under IAS 18	2018	2019	Total
Cell Phone	-		-
Telephony & Internet	431,88	431,88	863,76
Total	431,88	431,88	863,76
IFRS 15 vs. IAS 18	158,14	- 158,14	-

Table 14: Revenue recognition - comparison IFRS 15 vs. IAS 18 – telecommunications industry – 4.1.2., Source: own.

Table 15 visualizes the impact of the revenue recognition scheme on the balance sheet, income statement, and the cash flow statement. The table shows that revenue recognition (accounting) and billing already diverge at contract inception. The customer receives the cell phone for free, which does not represent the catalog price. Hence, the relative SSP (€ 316,28) of the cell phone is recognized as revenue. As there is no consideration for the cell phone transferred to match the amount of performance obligation satisfied the entity capitalizes a contract asset at contract inception. The asset represents the entity's right for "additional" consideration since the transferred goods or services outbalance the current consideration performed. Throughout the contract period, the contract asset is amortized by the customer's payments.

Performance obligation	Revenue recognition			Total
	01.01.2018	31.12.2018	31.12.2019	
Statement of Fin. Pos.				-
Contract Asset	316,28	158,14	-	474,42
Income statement	**316,28**	**273,74**	**273,74**	**863,76**
Cell Phone	316,28			316,28
Telephony & Internet		273,74	273,74	547,48
Cashflow statement				**863,76**
Payments		431,88	431,88	863,76

Table 15: Opening and closing balance of contract assets – telecommunications industry – 4.1.2., Source: referring to BARDENS/WALLEK (2016), p. 331.

As described in section 3.7.2, specific guidance for the notes requires the entity to disclose the opening and closing balance of contract assets and contract liabilities.[245] The table below shows the development of the contract asset with regard to the underlying contract. It is notable that the contract asset as of 01.01. represents the amount prior to the transfer of the cell phone to the

[245] S. IFRS 15.116.

customer. The contract asset is reduced by € 158,14 at the end of the year 2018 and 2019 because the payment exceeds the relative SSPs of the performance obligations concerned by the same amount (€ 431,88 - € 273,74).

Opening and closing balances of contract assets	31.12.2018	31.12.2019
Contract Asset as of 01.01. (before transport of equipment)		158,14
Revenue from contracts with customers	590,02	273,74
-Considerations received	431,88	431,88
Contract Asset	158,14	-

Table 16: Disclosure requirements under IFRS 15 – telecommunications industry – 4.1.2., Source: referring to BARDENS/WALLEK (2016), p. 331.

Besides, revenues have to be categorized to enable the user of financial statements to infer the type, the amount, and the timing of the revenue.[246] Due to the specific guidance that exceeds the provisions for segment reporting under IFRS 8, IFRS 15.115 requires a transition from the categories applied under IFRS 15.114 to the revenues in the segment reporting. [247]

Category	Segment		
	Austria	Slovenia	Croatia
	EUR	EUR	EUR
Segment Revenue			
hereof Inter-Segment-Revenue			
hereof Leasing			
Segment Revenue from contracts with customers	590,02		
Major goods/service lines			
Mobile communications	590,02		
Landline			
	590,02	-	-
Timing of revenue recognition			
Goods transferred at a point in time	316,28		
Services transferred over time	273,74		
	590,02	-	-

Table 17: Disclosure requirements under IFRS 15 – telecommunications industry – 4.1.2., Source: referring to BARDENS/WALLEK (2016), p. 331.

[246] S. IFRS 15.114.
[247] S. IFRS 15.115; IFRS 15.114.

Beyond that, (partially) unsatisfied performance obligations have to be disclosed as well. Bardens and Wallek note that the timing and the type of performance obligations shall be considered.[248]

Performance obligations	273,74
within subsequent year	273,74
between 1 to 2 years	
between 2 to 3 years	
more than 3 years	
Performance obligations	**273,74**
hereof Services	273,74
hereof expendable items	
hereof warranties	
hereof other obligations	

Table 18: Performance obligations - timing of revenue recognition – telecommunications industry – 4.1.2., Source: referring to BARDENS/WALLEK (2016), p. 331.

[248] Cf. BARDENS/WALLEK (2016), p. 332.

4.2. Information Technology Industry

Companies operating in the technology sector are famous for the diversity of its operations and long-term contracts. Their services include the development of software, selling software licenses, or providing various related services. Thus, the main challenges refer to the identification of individual performance obligations, assessment of progress towards the satisfaction of the contract, and the assessment of licenses sold by software vendors.

4.2.1. Case Study I – IT-Sector

The entity operates in the IT sector and provides various services. In September 2018, it enters into a contract with a customer to introduce a new ERP system. The following consulting services are stipulated in the contract.

Consulting Services		Daily rate in EUR	Man Days	Total in EUR
Project Management	Project Management	1 750,00	75,00	131 250,00
	Workshops	1 250,00	10,00	12 500,00
Functional Areas	Marketing & CRM	1 250,00	15,00	18 750,00
	Sales	1 250,00	30,00	37 500,00
	Services	1 250,00	-	-
	Purchasing	1 250,00	5,00	6 250,00
	Supply Chain Management	1 250,00	-	-
	Production	1 250,00	-	-
	Finance & Controlling	1 250,00	40,00	50 000,00
	Personal Management	1 250,00	35,00	43 750,00
Data Migration	Data Migration Workshop	1 250,00	5,00	6 250,00
	Support Live-Migration	1 250,00	5,00	6 250,00
Testing	Support Integration	1 250,00	10,00	12 500,00
Go-Live	Support Go-Live	1 250,00	8,00	10 000,00
	Hyper-Care after Go-Live	1 250,00	8,00	10 000,00
	Support first monthly settlement	1 250,00	12,00	15 000,00
Total amount			**258,00**	**360 000,00**

Table 19: Contract components: Consulting - IT industry - 4.2.1., Source: own.

As the customer requires various adaptations to the ERP system, additional services are provided by the development team of the same entity.

Development Services	Daily rate in EUR	Man Days	Total in EUR
Automatic Project Creation	1 350,00	30,00	40 500,00
Collective agreement	1 350,00	10,00	13 500,00
Report upgrading	1 350,00	10,00	13 500,00
Consolidation	1 500,00	50,00	75 000,00
Total amount		**100,00**	**142 500,00**

Table 20: Contract components: Development - IT industry - 4.2.1., Source: own.

The entity and the customer agree on a monthly settlement. Until the end of 2018, the following costs have accumulated to fulfill the contract. The development costs relate to all services, but consolidation.

Staff Type	Man Days rendered	Costs	Total
Consulting	45,00	960,00	43 200,00
Development	50,00	800,00	40 000,00
Costs incurred as of 31.12.2018	**95,00**		**83 200,00**

Table 21: Man days accumulated until year end – IT industry – 4.2.1., Source: own.

It has to be assessed how the entity should recognize revenue for this contract.

To begin with, the first step of the revenue recognition model requires the identification of a contract with a customer. Both parties have approved and are committed to perform their obligations. The rights of each party concerning the goods and services to be transferred can be identified, and the underlying payment terms have been stipulated as well. Additionally, a commercial substance is given, and there is no information that contradicts the probable collection of the consideration. Hence, a contract with a customer is on hand.

Next, it has to be verified if more than one performance obligation is included in the contract. As described in section 3.3.2, the capability of being distinct and the distinction in the context of the contract have to be examined. It can be argued that all services related to consulting can be bundled as one obligation since the type of transfer is the same. Stipulated consulting services are necessary to configure the ERP system successfully. One service alone cannot lead to the satisfaction of the contract. Hence, the consulting services are bundled to one service obligation. The same applies to the development services. However, each development service can be distinguished as it provides different functionality for the customer. Consequently, these services could be separated, as well. The development services can be provided without consulting services. As a prerequisite, the ERP system has to be in place. Nevertheless, the configuration of the system could have been performed by another entity. Therefore, five performance obligations can be identified.

Subsequently, the transaction price needs to be identified. The overall transaction price amounts to € 502 500,00. There are no variable considerations included in the contract. Hence, the next step can be approached. The transaction price has to be allocated to the performance obligations. Since all prices correspond with the entity's catalog prices, no relative SSPs have to be calculated.

Lastly, the focus is set on the satisfaction of performance obligations. It has to be verified if the recognition of revenue takes place over time or at a point of time. IFRS 15.35 states three criteria to qualify for recognition over time.[249] At least one of the criteria has to be fulfilled. In the underlying case, the entity creates an asset without an alternative use to the entity. Further, it has an enforceable title to the payment of the performance delivered. It is notable that although services are immaterial, they qualify as an asset, which can be consumed.[250] When revenue streams are reported over time, the percentage of completion of each performance obligation has to be determined at the end of each reporting period. There are two types of methods available to determine the percentage of completion. The entity should select a single recognition method that accurately depicts the entity's performance. Further, it should be applied consistently to similar performance obligations. Detailed information on the methods available is provided in section 3.3.5. For the underlying contract, the entity chooses to use an input method based on the costs incurred until the reporting date.

To calculate the percentage of completion for the consulting services, the costs of one man-day are multiplied with the days accumulated until the reporting date. Next, the total costs for consulting services are determined. The proportion of the costs accumulated and the total costs result in the current stage of completion. The same steps are necessary to calculate the percentage of completion for the development services. Since the hourly rate of the three development services is the same, costs for development can be accumulated.

Revenue recognition under IFRS 15			
Consulting	**Days**	**Costs**	**Total**
Man Days rendered as of 31.12.2018	45,00	960,00	43 200,00
Total Man Days	258,00	960,00	247 680,00
Stage of Completion Consulting			**17,44%**
Development	**Days**	**Costs**	**Total**
Man Days rendered as of 31.12.2018	50,00	800,00	40 000,00
Total Man Days	100,00	800,00	80 000,00
Stage of Completion Development			**50,00%**

Table 22: Revenue recognition under IFRS 15 - IT industry - 4.2.1., Source: own.

The resulting revenue to recognize at the reporting date amounts to € 134 040,70.

This revenue might differ from the revenue recognized under the previous standard IAS 18. The legacy-standard also required the recognition of revenue from similar services using the stage of completion. IAS 18.24 states that the stage of completion of a transaction may be determined by the proportion of costs incurred to date to the estimated total costs of the transaction.[251] Since

249 S. IFRS 15.35.
250 S. IFRS 15.33.
251 S. IAS 18.24.

IAS 18 lacks guidance to identify separate performance obligations, the entity might have identified only one performance obligation under IAS 18. As a result, all costs incurred would have been compared to the total costs estimated.

Revenue recognition under IAS 18			
Man days rendered as of 31.12.2018	**Days**	**Costs**	**83 200,00**
Consulting	45,00	960,00	43 200,00
Development	50,00	800,00	40 000,00
Total man days			**327 680,00**
Consulting	258,00	960,00	247 680,00
Development	100,00	800,00	80 000,00
Stage of Completion			**25,39%**

Table 23: Revenue recognition under IAS 18 - IT industry - 4.2.1., Source: own.

This would result in a revenue of € 127 587,89. In comparison to IAS 18, the new standard would have realized € 6 452,81 additionally.

4.3. Automobile Industry

For sections 4.3.1 and 4.3.2, the examined entity operates in the automobile industry. Its product range includes several car classifications which are distributed at various conditions. The entity offers a number of value-added services to complete its product range. Besides offers for fleet customers, free maintenance services or rights to return after a prior stipulated duration are on offer.

4.3.1. Car Sale, Discount and repurchase

The current business case covers the sale of a vehicle fleet to a business client. It includes two vehicles for the customers' CEO and CFO, four vehicles for the divisional managers as well as ten vehicles for sales representatives. The respective list prices for the models "Limousine", "Performance" and "Drive" account for € 65 000,00, € 37 500,00 and € 25 000,00 respectively. The total vehicle fleet for the customer adds up to € 530 000,00. The entity offers the fleet for a total price of € 450 000,00 less a 5 percent cash discount. In addition, the models "Limousine" can be returned after three years. A repurchase price of € 30 000,00 per car is designated if a mileage of 60 000 km is not exceeded. The payment takes place at delivery.

The underlying contract has to be assessed to determine if a contract with a customer is on hand, which performance obligations can be identified and how the transaction price has to be allocated to the respective obligations.

First, it has to be verified that all models correspond with the definition of a contract with a customer under IFRS 15. Models "Performance" and "Drive" fulfill the criteria of IFRS 15.9. The model "Limousine" however, comprises a right to return after three years. As described in detail in section 3.3.3.2., the treatment of the right to return depends on the type of good and the stated period to return the good. The expected rate of return reduces the revenue if the right to return can be called within days after the purchase. In the case at hand, the return follows a three-year usage. As a consequence, IFRS 15.B66a and IFRS 15.B70 demand the recognition of an operating lease agreement, according to IFRS 16. For reasons of simplification it is assumed that the treatment of operating leases under IFRS 16 corresponds with the legacy-standard IAS 17.

Next, performance obligations have to be identified. To qualify as a separate obligation, the presence of being 'distinct' has to be assessed.[252] In order to meet the definition, the customer has to be able to either benefit alone or through readily available resources from each PO. Also, no integration service shall be provided, no significant customization takes place, and there is no interdependence between the components of the contract.[253] Because both criteria are fulfilled, three separate performance obligations can be identified.

Following the identification of performance obligations, the transaction price has to be determined. The granted cash discount qualifies as a price deduction which has to be considered when determining the transaction price. IFRS 15.52 further states that deductions to cement customer relationships represent variable consideration.[254] The allocation of cash discounts to single obligations requires a clear assignment stipulated in the contract. Otherwise, the cash discount is allocated proportionally to all performance obligations.[255] Hence, the entire transaction price of € 450 000,00 is reduced to € 427 500,00. The relative stand-alone selling prices are calculated by dividing the SSPs of the model by the total SSP (e.g., € 130 000,00 / € 530 000,00). Subsequently, the transaction price is allocated to each obligation with the respective allocation factors (= relative SSPs).

Product	List Price	Amount	SSP	Discount	Transaction Price	Allocation Factor	Allocated amount before discount	Allocated amount after discount
Model Limousine	65 000,00	2	130 000,00	5 518,87		0,245	110 377,36	104 858,49
Model Performance	37 500,00	4	150 000,00	6 367,92		0,283	127 358,49	120 990,57
Model Drive	25 000,00	10	250 000,00	10 613,21		0,472	212 264,15	201 650,94
Amounts/Contract			**530 000,00**	**22 500,00**	**427 500,00**	**1,000**	**450 000,00**	**427 500,00**

Table 24: Consideration of discounts and repurchase agreements – automobile industry – 4.3.1., Source: own.

At delivery, the complete receipt of money is recognized. The revenue will only be realized for models "Drive" and "Performance" amounting to € 322 641,51 because a concealed lease agreement is on hand for model "Limousine". The underlying transaction represents a right to use an asset. Therefore, a lease liability is recognized at an amount of € 104 858,49. At the end of each year, revenue arising from the right to use is realized. Thus, an amount of € 14 952,83 is realized every year. It is calculated by subtracting the repurchase price (€ 60 000,00) from the attributable transaction price (€ 104 858,49) and allocating the amount to the years 2018, 2019 and 2020. In 2020, the return takes place. In addition to the revenue from the right to use, the payment of the repurchase price takes place. The following table illustrates the business transactions.

[252] S. IFRS 15.27
[253] S. IFRS 15.29.
[254] S. IFRS 15.52.
[255] S. IFRS 15.81-83.

Performance obligation	Revenue recognition				Total
	15.01.2018	31.12.2018	31.12.2019	31.12.2020	
Statement of Fin. Pos.					**-**
Lease Liability	104 858,49	89 905,66	74 952,83	- 0,00	
Income statement	**322 641,51**	**14 952,83**	**14 952,83**	**14 952,83**	**367 500,00**
Limousine		14 952,83	14 952,83	14 952,83	44 858,49
Performance	120 990,57				120 990,57
Drive	201 650,94				201 650,94
Cashflow statement					**367 500,00**
Payments	427 500,00			- 60 000,00	367 500,00

Table 25: Impact on components of annual statement of accounts - automobile industry - 4.3.1., Source: referring to BARDENS/WALLEK (2016), p. 331.

Table 26 shows the disclosure requirements for the year 2018. According to IFRS 15.114, revenue has to be categorized with regard to the type, the amount, and the timing.[256]

Category	Segment	
	Commercial Vehicle	Passenger Car
	EUR	EUR
Segment Revenue		
hereof Inter-Segment-Revenu	-	
hereof Leasing	14 952,83	
Segment Revenue from contracts with customers	337 594,34	
Countries		
Austria	337 594,34	
USA		
	337 594,34	-
Major goods/service lines		
Maintenance		
Pick-Up	337 594,34	
Crafter		
Crafter chassis cab		
	337 594,34	-
Timing of revenue recognition		
Goods		
transferred at a point in time	322 641,51	
Services		
transferred over time	14 952,83	
	337 594,34	-

Table 26: Disclosure requirements under IFRS 15 – automobile industry – 4.3.1., Source: referring to BARDENS/WALLEK (2016), p. 331.

256 S. IFRS 15.114.

4.3.2. Car Purchase and Maintenance Agreement

The entity sells a pickup truck (type “Transporter”) to customer X, which operates in the construction industry for a total amount of € 27 500,00. Along with the truck, a maintenance package is included to cover the total costs of the truck throughout the useful life of the truck. The maintenance service covers five years and a total mileage of 100 000 km. Annual mileage of 17 500 km is assumed. The list price for the truck amounts to € 30 000,00, whereas the maintenance service comes to € 2 000,00. The stipulated payment conditions include an advance payment of 40 percent at order, and the remaining 60 percent shall be paid within three months following the delivery. As it is a new model, the delivery period is three months. The contract was signed on 15 January 2018. The delivery was performed on 15 March 2018. However, the entity learns about impending financial difficulties shortly after the delivery due to the absence of construction orders. As a result, a settlement of 75 percent of outstanding debt is estimated at delivery. On 7 June 2018, it became known that the cash position of the customer has improved and a total settlement is reasonable. For maintenance agreements, the entity factors € 500,00 per maintenance cycle or every two years in.

It has to be assessed if a contract with a customer is on hand, which performance obligations can be identified and how the transaction price has to be allocated to the respective obligations.

The sale of the truck also includes the sale of a maintenance service which is considered in the total selling price of € 27 500,00. Therefore, it has to be verified whether the multiple-element agreement consists of two separately identifiable performance obligations. In order to determine separate obligations, the definition of ‘distinction’ has to be met.[257] First, the customer has to be able to either benefit alone or through readily available resources from each PO. Second, no integration service shall be provided, no significant customization takes place, and there is no interdependence between the components of the contract. Both need to be true to meet the definition. Since the contract components fulfill the requirements, two separate performance obligations can be identified. This is because the customer can benefit from the truck and the maintenance service independently. Furthermore, no integration service has been provided, no customization took place, and there is no interdependence between the truck and the maintenance service. Besides, the separate information about the costs of the maintenance service represents a relevant indicator for the determination. Moreover, it can be argued that maintenance agreements fall within the scope of IFRS 15.26 as so-called stand-ready obligations.[258] While the sale of the

[257] S. IFRS 15.27.
[258] S. IFRS 15.26.

truck suggests revenue recognition at a point in time, the maintenance service is recognized over the contract period.

With regard to the transaction price, € 25 500,00 can be allocated to the truck, and € 2 000,00 refer to the maintenance service. The contract does not suggest any variable consideration, but due to the stipulated payment conditions, it has to be assessed if a significant financing component is on hand. However, IFRS 15.63 includes a practical expedient stating that a financing component can be ignored if the time between the satisfaction of a performance obligation and the time of payment is within one year.[259] As a result, no financing component is considered in the current business case.

As a next step, the transaction price is allocated to its corresponding performance obligations. As outlined in section 3.3.4, the relative stand-alone selling prices are determined. The stand-alone selling price is the price the entity would charge if the good or service would have been sold separately. In this case, the SSP for the car amounts to € 30 000,00 and € 2 000,00 would be charged for the maintenance service. The calculation of the rel. SSPs can be found in Table 27.

Product	Selling Price	Amount	ısaction Price	SSP	Allocation Factor	Allocated amount	Recognition
Car	25 500,00	1	25 500,00	30 000,00	0,938	25 781,25	point in time
Maintenace	2 000,00	1	2 000,00	2 000,00	0,063	1 718,75	over time
Amounts/Contract			27 500,00	32 000,00	**1**	**27 500,00**	

Table 27: Determination of rel. SSPs – automobile industry – 4.3.2., Source: own

The stipulated advance payment of € 11 000,00 (€ 27 500,00 x 40%) takes place at contract inception. As no performance obligation is (partially) satisfied yet, no revenue can be realized. Instead, the payment received has to be accounted for as a contract liability. The revenue is recognized when the car is delivered. However, in order to account for a contract, all criteria of IFRS 15.9 have to be fulfilled.[260] As the collectability can only be assumed at 75 percent, IFRS 15.9 (e) approves the recognition of revenue amounting to € 21 656,25. Since € 11 000,00 have already been paid (advance payment), the remaining amount of € 16 500,00 has to be adapted according to its collectability of 75 percent (€ 12 375,00) and reduced by the maintenance fees of € 1 718,75 as they will be recognized over time. As a result, € 21 656,25 (€ 11 000,00 + € 12 375,00 - € 1 718,75) are recognized as revenue. That implies that the amount receivable has to be reduced by 25 percent (€ 4 125,00) and the contract liability is adjusted to € 1 718,75 since the maintenance service will be provided within the next five years. As soon as it becomes known that full collectability is probable, the accounts receivable are increased by

[259] S. IFRS 15.63.
[260] S. IFRS 15.9.

€ 4 125,00 and revenue of the same amount is recognized. The contract liability will be reduced annually by € 343,75, and revenue will be realized at the same amount. The recognition is based on consistent mileage and adherence to maintenance intervals. Table 28 summarizes the described business transactions.

Performance obligation	Revenue recognition									Total
	15.01.2018	15.03.2018	07.06.2018	15.06.2018	15.03.2019	15.03.2020	15.03.2021	15.03.2022	15.03.2023	
Statement of Fin. Pos.										**-**
Receiveables		12 375,00	16 500,00							
Contract Liability	11 000,00	1 718,75	1 718,75	1 718,75	1 375,00	1 031,25	687,50	343,75	-	
Income statement	**-**	**21 656,25**	**4 125,00**	**-**	**343,75**	**343,75**	**343,75**	**343,75**	**343,75**	**27 500,00**
Truck		21 656,25	4 125,00							25 781,25
Maintenance					343,75	343,75	343,75	343,75	343,75	1 718,75
Cashflow statement										**27 500,00**
Payments	11 000,00			16 500,00						27 500,00

Table 28: Impact on components of annual statement of accounts – automobile industry – 4.3.2., Source: referring to BARDENS/WALLEK (2016), p. 331.

Again, the new disclosure requirements demand the presentation of the opening and closing balance of contract assets and contract liabilities.[261] The table below shows the development of the contract liability with regard to the underlying contract. Within the first year, the total consideration of € 27 500,00 is paid. The entity will only recognize € 25 781,25 as revenue and defers the remaining amount of € 1 718,75 as a contract liability since the maintenance service has not yet been performed.

Opening and closing balances of contract liabilities and liabilities as of	31.12.2018	31.12.2019	31.12.2020	31.12.2021	31.12.2022	31.12.2023
Contract Liability as of 01.01.	-	- 1 718,75	- 1 375,00	- 1 031,25	- 687,50	- 343,75
Revenue from contracts with customers	25 781,25	343,75	343,75	343,75	343,75	343,75
-Considerations received	27 500,00	-		-	-	-
Contract Liabilty	- 1 718,75	- 1 375,00	- 1 031,25	- 687,50	- 343,75	-

Table 29: Opening and closing balance of contract liabilities – automobile industry – 4.3.2., Source: referring to BARDENS/WALLEK (2016), p. 331.

[261] S. IFRS 15.116.

In addition, revenues have to be categorized to enable the user of financial statements to infer the type, the amount, and the timing of the revenue.[262]

Category	Segment	
	Commercial Vehicle	Passenger Car
	EUR	EUR
Segment Revenue		
hereof Inter-Segment-Revenue	-	
hereof Leasing	-	
Segment Revenue from contracts with customers	25 781,25	
Countries		
Austria	25 781,25	
USA		
	25 781,25	-
Major goods/service lines		
Maintenance		
Pick-Up	25 781,25	
Crafter		
Crafter chassis cab		
	25 781,25	-
Timing of revenue recognition		
Goods		
transferred at a point in time	25 781,25	
Services		
transferred over time	-	
	25 781,25	-

Table 30: Disclosure requirements under IFRS 15 – automobile industry – 4.3.2., Source: referring to BARDENS/WALLEK (2016), p. 331.

Because the maintenance service will be performed in the following five years, (partially) unsatisfied performance obligations with regard to their timing and their type have to be disclosed as well.

Performance obligations	1 718,75
within subsequent year	343,75
between 1 to 2 years	343,75
between 2 to 3 years	343,75
more than 3 years	687,50
Performance obligations	1 718,75
hereof Truck	-
hereof Maintenance	1 718,75

Table 31: Performance obligations - timing of revenue recognition - automobile industry - 4.3.2., Source: referring to BARDENS/WALLEK (2016), p. 331.

[262] S. IFRS 15.114.

4.4. Health Care Industry

4.4.1. Health Care

The following entity operates in the health care industry and supplies customers with medical equipment and appropriate expendable items. Besides equipment, the concluded contract contains regular services to maintain the equipment. Furthermore, the customer requested a warranty extension to cover the entire contract period. The contract period started on 01.01.2018 and will expire on 31.12.2022. The medical equipment is sold for € 7 500,00 and is transferred right away. For the expendable items, the maintenance service and the warranty extension a lump sum of € 15 000,00 per year is stipulated.

First, it has to be assessed at contract inception if the agreement fulfills the criteria to be a contract within the scope of IFRS 15. Both parties approved the contract and are committed to perform their obligations. Further, the rights to each party with regard to the goods and services to be transferred shall be identifiable. The customer receives medical equipment and appropriate products which will be consumed through the usage of the equipment. The entity maintains the equipment and guarantees proper usage until the end of the contract. As a consideration, it receives € 7 500,00 for the equipment at contract inception and annual payments of €15 000,00. The payment terms can hereby be identified, and as it is the core business of the entity, commercial substance is given as well. Finally, the collection of the consideration is probable. Consequently, the contract fulfills all criteria of IFRS 15.9 and qualifies as a contract under the standard.

Second, performance obligations have to be identified. It has to be evaluated, whether the goods and services promised match the definition of being distinct. Therefore, the question has to be raised whether the customer can benefit from the good or service alone or with other readily available resources. Besides, the promised good or service shall not be a mere antecedent to other contract components, shall not essentially modify other components and shall not be crucially interdependent or linked to other components. [263] Thus, if a promised good or service is not distinct, the entity is required to combine the respective good or service with other goods and services (included in the contract) until it identifies a bundle of goods or services that, as a whole, is distinct. The entity would not need any additional goods or services to benefit from the medical equipment. Further, the products (expendable items) used with the equipment can be purchased independently and does not require the customer to buy both. The maintenance service and the

[263] S. IFRS 15.29.

warranty extension have been separately agreed upon, and the customer can separately benefit from these components as the maintenance leads to operative medical equipment, and the extension preserves the customer from additional costs. According to IFRS 15.BC116R, transportation can only be a separable performance obligation if it was provided after the control of the good was transferred to the customer.[264] Therefore, all components of the contract are separable performance obligations.

Third, the entity determines the transaction price. Since the medical equipment is sold and instantly transported for a consideration of € 7 500,00 and the lump sum is paid annually for five years, the total transaction price amounts to € 82.500,00. There is no hint to an underlying financing component, and no variable considerations are included.

Following the determination, the transaction price is allocated to the respective performance obligations on the basis of the relative stand-alone selling price. As stated in the examples above, the standard suggests to use the price charged if the good or service was sold separately. Their single selling price amounts to € 12 000,-- and € 11 500,00. The transport of the equipment performed at contract inception would usually account for €1 000,00. The maintenance service and the warranty extension would cost € 2 500,00 and € 1 500,00, respectively. The figure below shows the calculation of the allocation factor. Each SSP is set in proportion to the total SSP. Subsequently, the transaction price is multiplied with each allocation factor to determine the relative SSP (here allocated amount).

Product	Selling Price	Years	Transaction Price	SSP	Allocation Factor	Allocated amount	Recognition
Medical equipment	7 500,00	1	7 500,00	12 000,00	0,14	11 314,29	at inception
Transport		1		1 000,00	0,01	942,86	at inception
Expendable items/year	15 000,00	5	75 000,00	57 500,00	0,66	54 214,29	at delivery date
Service/year		5		12 500,00	0,14	11 785,71	over period
Additional warranty		3		4 500,00	0,05	4 242,86	over period
Total			82 500,00	87 500,00		82 500,00	

Table 32: Contract components – health care industry – 4.4.1., Source: referring to BARDENS/WALLEK (2016), p. 330.

The final step focuses on revenue recognition and its timing. Since the medical equipment is delivered immediately, revenue is recognized at inception. This is true for transportation as well. The expendable items, which will be delivered annually, are recognized at the delivery date. The maintenance service will be allocated on a continuing basis over the contract period. The warranty extension will be recognized in the years 2020 to 2022 as the assurance-type warranty, which is required by law, will cover the first two years.

[264] S. IFRS 15.BC116R.

Table 33 visualizes the impact of the revenue recognition scheme on the balance sheet, income statement, and the cash flow statement. The graphic shows that revenue recognition (accounting) and billing already diverge at contract inception. The customer pays € 7 500,00 for the equipment, although the price does not represent the stand-alone selling price. Hence, the relative SSP (€ 11 314,29) of the equipment is recognized as revenue. The same applies to transport. Since the consideration of € 7.500,00 does not match the amount of performance obligations satisfied (€ 11 314,29 + € 942,86 - € 7 500,00) the entity capitalizes a contract asset at contract inception. The asset represents the entity's right for "additional" consideration since the transferred goods or services outbalance the current consideration performed. Throughout the contract period, the contract asset is amortized by the customer's payments.

Performance obligation	Revenue recognition						Total
	01.01.2018	31.12.2018	31.12.2019	31.12.2020	31.12.2021	31.12.2022	
Statement of Fin. Pos.							**-**
Contract Asset	4 757,14	2 957,14	1 157,14	771,43	385,71	-	-
Income statement	**12 257,14**	**13 200,00**	**13 200,00**	**14 614,29**	**14 614,29**	**14 614,29**	**82 500,00**
Medical equipment	11 314,29	-	-	-	-	-	11 314,29
Transport	942,86	-	-	-	-	-	942,86
Expendable items/year	-	10 842,86	10 842,86	10 842,86	10 842,86	10 842,86	54 214,29
Service/year	-	2 357,14	2 357,14	2 357,14	2 357,14	2 357,14	11 785,71
Additional warranty	-	-	-	1 414,29	1 414,29	1 414,29	4 242,86
Cashflow statement							**82 500,00**
Payments	7 500,00	15 000,00	15 000,00	15 000,00	15 000,00	15 000,00	82 500,00

Table 33: Impact on components of annual statement of accounts – health care industry – 4.4.1., Source: referring to BARDENS/WALLEK (2016), p. 331.

As outlined in section 3.7.2, specific guidance for the notes requires the entity to disclose the opening and closing balance of contract assets and contract liabilities.[265] The table below shows the development of the contract asset with regard to the underlying contract. It is notable that the contract asset as of 01.01. represents the amount prior to the transport of the equipment to the customer. The contract asset is reduced by € 1 800,00 within the year 2018 because the payment of the lump sum exceeds the relative SSPs of the performance obligations concerned by the same amount (€ 15 000,00 - € 13 200,00).

Opening and closing balances of contract assets and liabilities as of	31.12.2018
Contract Asset as of 01.01. (before transport of equipment)	-
Revenue from contracts with customers	25 457,14
-Considerations received	22 500,00
Contract Asset	2 957,14

Table 34: Opening and closing balance of contract assets – health care industry – 4.4.1., Source: referring to BARDENS/WALLEK (2016), p. 331.

265 S. IFRS 15.116.

Furthermore, revenues have to be categorized to enable the user of financial statements to infer the type, the amount, and the timing of the revenue.[266] Due to the specific guidance that exceeds the provisions for segment reporting under IFRS 8, IFRS 15.115 requires a transition from the categories applied under IFRS 15.114 to the revenues in the segment reporting. [267]

Category	Segment: Medical Engineering	Segment: Bioengineering
	EUR	EUR
Segment Revenue		
hereof Inter-Segment-Revenue	-	
hereof Leasing	-	
Segment Revenue from contracts with customers	25 457,14	
Countries		
Austria	25 457,14	
USA		
	25 457,14	-
Major goods/service lines		
Hospital technology		
Dialysis		
Clinical diagnostics	25 457,14	
Tissue Engineering		
	25 457,14	-
Timing of revenue recognition		
Goods transferred at a point in time	22 157,14	
Services transferred over time	3 300,00	
	25 457,14	-

Table 35: Disclosure requirements under IFRS 15 – health care industry – 4.4.1., Source: referring to BARDENS/WALLEK (2016), p. 331.

Beyond that, (partially) unsatisfied performance obligations have to be disclosed as well. Bardens and Wallek note that the timing and the type of performance obligations shall be considered.[268]

Performance obligations	57 042,86
within subsequent year	13 200,00
between 1 to 2 years	14 614,29
between 2 to 3 years	14 614,29
more than 3 years	14 614,29
Performance obligations	57 042,86
hereof Services	9 428,57
hereof expendable items	43 371,43
hereof warranties	4 242,86
hereof other obligations	-

Table 36: Performance obligations - timing of revenue recognition – health care industry 4.4.1., Source: referring to BARDENS/WALLEK (2016), p. 331.

[266] S. IFRS 15.114.
[267] S. IFRS 15.115; IFRS 15.114.
[268] Cf. BARDENS/WALLEK (2016), p. 332.

5. RESUME

5.1. Summary

The new revenue recognition standard affects various industries to a variable extent. While the construction industry faces changes in recognition of revenues over time, the IT and telecommunications industry now received a more detailed guide to identifying separate performance obligations. Due to the common conclusion of multi-component contracts in these industries, the new standard provides a granular framework to identify the performance obligations and allocate the transaction prices to their respective obligations. What is more, is that the accounting for directly attributable contract cost to obtain or fulfill a contract could result in additional expenses for companies. This results from the capitalization of costs to obtain or fulfill a contract, which then will be amortized over the contract period. Unlike legacy-standards, IFRS 15 comprises all contracts with customers. Thus, all contracts with customers have to be analyzed in terms of separable performance obligations. Also, it has to be assessed, based on specific criteria, if the revenue recognition is performed over time or at a point of time. In particular, goods or services provided have to be assessed whether or not an alternative use can be assumed or are part of a customer-specific contract. As pointed out in the contract analyses above, the new standard regularly leads to an earlier revenue recognition when compared to legacy standards. In many cases, the accounting of contracts has to consider variable components which involve estimations and margins of discretion.

The superseding standard enhances quantitative as well as qualitative disclosure requirements, especially improving revenue-oriented disclosures focusing on entity-specific notes. In addition, entities are required to disclose further information if they operate in the field of long-term contract manufacturing.[269] Besides revealing the amount of contract revenue recognized within the reporting period, the methods used to determine revenue as well as the methods used to determine the stage of completion of ongoing projects have to be included too. Due to the practical expedients, margins to discretion and accounting reliefs, it remains the decision of the IFRS-applicants which level of detail the notes concerning revenue recognition will display. As already indicated in the introduction, entities are faced with changeover and adaption expenditures. Since accounting and billing now diverge, new triggers to launch the revenue recognition process have to be implemented. Along with the necessity to adapt the system landscape, companies have to analyze the effects on covenants, KPIs, and the financial control as a such.

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[269] S. IAS 11.39.

5.2. Conclusion and outlook

The new standard includes numerous changes as well as improved or new guidance to revenue recognition under IFRS. The implemented five-step model serves as the centerpiece and resolves several questions IFRS-applicants posed due to the legacy standards. Thus, IFRS now offers a better framework to recognize revenue. As legacy standards partially offered little to no guidance, resulting in a wide discretion, the superseding standard gives much less room for an entity's accounting. Consequently, applicants do not have to consult the US-GAAP for guidance.

However, the new provisions result in a change or adaption of IT systems and processes. Despite efforts to converge IFRS and US-GAAP, the revenue recognition standard IFRS 15 and ASC 606 do not correlate completely. Furthermore, the IASB gives leeway to IFRS-applicants, e.g., when it comes to the combination of contracts (portfolio approach) or the handling of costs to obtain or fulfill a contract.

To conclude, IFRS 15 offers a solid basis for the recognition of revenue, but accounting and reporting practice will show if the boards' aims to remove inconsistencies and improve the comparability of revenue recognition practices to provide more useful information to the users of financial statements have been achieved. Moreover it remains unclear if the new standard portrays business transactions or influences the design of business transactions.

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APPENDIX