EURO

PUBLIC SECTOR ACCOUNTING

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CHAPTER 13 CONSOLIDATION METHODS

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SUMMARY

This chapter aims to illustrate consolidated financial reporting according to IPSAS by applying consolidation methods. Public sector combinations according to IPSAS are introduced. The process of consolidated financial reporting is explained by illustrating full consolidation comprising of the four different procedures of consolidation and the application of the equity method. The relevant steps are illustrated by short case examples. This IPSAS-focused chapter informs about when consolidated financial statements must be prepared, which entities must be included and by which methods, how to set up the accounting records for consolidation and relevant consolidation procedures.

KEYWORDS

Consolidation, consolidated financial reporting, consolidation methods, full consolidation, equity method, public sector combinations, goodwill

1. Introduction

The preceding Chapter 12 introduced important terms with respect to consolidated financial statements (CFS) and highlighted conceptual problems related to the public sector. The consolidation methods and accompanying procedures have been shortly introduced and explained; however, without a specific focus on International Public Sector Accounting Standards (IPSAS). Chapter 13 is devoted to consolidation methods relevant for IPSAS CFS. Thereby, the terms introduced in Chapter 12 serve as a basis. The relevant steps in the consolidation process are illustrated by short case examples, drawing on the municipality Eucity that has already been subject of the case study presented in Chapter 11. Whereas for Eucity, financial statements (FS) have been prepared for the local government only, this chapter now focuses on CFS, i.e. Eucity and its controlled entities, joint ventures and associates. However, due to the complexity of the consolidation processes, not a full case study is presented, but only selected examples. After this IPSAS-focused chapter, readers will know when IPSAS CFS must be prepared, which entities must be included and by which methods, how to set up the accounting records for consolidation and the relevant consolidation procedures.

Chapter 13 is structured as follows: Section 2 provides further definitions and background of consolidated financial reporting according to IPSAS. In particular, the term public sector combination (PSC) is introduced. Section 3 gives an overview about the relevant IPSAS that are needed for consolidated financial reporting. The process of consolidated financial reporting is subject of Section 4 by describing the IPSAS control concept, the principles of uniformity and the process of consolidated financial reporting. In Section 5, full consolidation and its relevant consolidation procedures are explained by examples. Finally, Section 6 introduces the application of the equity method with a conclusion provided in Section 7.

2. Definitions and background

A public sector entity that prepares its accounts in accordance with the accrual-based IPSAS and holds investments in a controlled entity, an associate or a joint venture may present separate financial statements (SFS), in which these investments are accounted for at cost, as financial instruments according to IPSAS 29 or using the equity method as described in IPSAS 36 (IPSAS 34.8; 34.12). If the reporting entity exercises control over one or more entities, CFS have to be presented for the economic entity (i.e. group) (IPSAS 35.5). CFS are FS of an economic entity in which the elements of the financial statements, namely liabilities, assets, net assets/equity, revenue and expenses and cash flows, of the controlling and controlled entities are presented as those of a single economic unit (IPSAS 35.14).

Like for FS, 1 also a complete set of IPSAS CFS consists of

- a) A statement of financial position;
- b) A statement of financial performance;
- c) A statement of changes in net assets/equity;
- d) A cash flow statement;
- e) A comparison of budget and actual amounts, if the entity makes publicly available its approved budget (either as separate FS or budget column in the FS):
- f) Notes, and
- g) Comparative information.

In general, a group is formed through a public sector combination (PSC).² A PSC is the bringing together of separate operations in a public entity (IPSAS 40.5). An operation is an "integrated group of activities and assets and/or liabilities that is capable of being managed or conducted for

¹ See Chapter 8.

² However, mostly in the public sector, the group will already exist before initial consolidation.

the purpose of achieving an entity's objectives, by providing goods and/or services" (IPSAS 40.5).³

The PSC might occur either by mutual agreement or by compulsion (for example by legislation). IPSAS 40 contains no provisions or restrictions with regard to the legal structure of PSCs or the abandonment of the legal capacity of the entities to be combined (IPSAS 40 AG1). The public entity that is formed through such PSC can be either a single reporting entity or an economic reporting entity consisting of several persisting reporting entities (IPSAS 40 AG2). Depending on which type of entity results from the PSC, the combination will be accounted for at the level of FS or CFS. This chapter refers to those PSCs that lead to the requirement of consolidated financial reporting. Therefore, the two relevant forms of PSCs need to be distinguished: amalgamation and acquisition (IPSAS 40.5), which also influence how these are consolidated.

An **amalgamation** is a combination (IPSAS 40.5),

- a) in which no party of the combination gains control of one or more operations; or
- b) in which one party gains control over one or more operations, whereby the economic substance of the combination is that of an amalgamation.

As a special case, a combination under common control is also considered as an amalgamation. It occurs if all entities or operations involved in the combination are controlled by the same entity before the combination as after it (IPSAS 40.5).

An **acquisition** occurs when a party to the combination obtains control of one or more operations and there is evidence that it is not an amalgamation (IPSAS 40.5). For the definition of control, reference is made to IPSAS 35 (see Subsection 4.1). It is therefore first necessary to assess, whether control over the operations is gained by one of the parties

 $^{^3}$ In this respect, there is a terminological difference to IFRS 3, as the term business is used in IFRS 3 instead of operation. Also, in contrast to IFRS 3.2c, also combinations under common control are within the scope of IPSAS 40.4/13c.

involved. If this is denied, an amalgamation exists, as can be seen from the assessment scheme in Figure 13.1. Otherwise, the economic substance of the amalgamation must be assessed on the basis of six indicators (IPSAS 40.12 and .13).

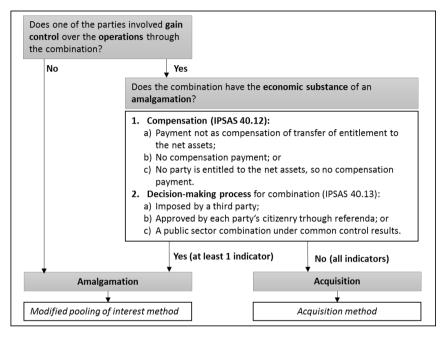


Figure 13.1: Distinction between amalgamations and acquisitions (IPSAS 40)

As shown in Figure 13.1, IPSAS 40 refers to two criteria of the amalgamation for the assessment of its economic substance: firstly, the consideration paid and secondly, how the PSC decision was made. Each criterion is based on three indicators to be fulfilled either individually or in combination (IPSAS 40.9). If at least one indicator is true (1.a to 1.c or 2.a to 2.c), it is an amalgamation. This is the case, if, for example, a PSC is enforced by third parties without the involvement of the combined entities (IPSAS 40 AG32), such as the nationalisation of a private company (IPSAS 40 AG35). On the other hand, an acquisition is prevailing if the entities involved participate at least voluntarily in the decision (IPSAS 40 AG32) in order to be able to exert a certain influence on the conditions for the combination (IPSAS 40 AG33). The most common **evidence of**

an acquisition is therefore (IPSAS 40 BC40): an entity involved in the combination gains the

- a) Control over an operation and pays consideration in exchange as a compensation for giving up the entitlement to the net assets of that operation;
- b) Control over an operation previously outside the public sector without payment of any consideration for giving up the entitlement to the net assets of that operation;
- c) Control over an operation previously outside the public sector by imposing (i.e. forcing) that combination;
- d) Control over an operation from a separate government.

An amalgamation is accounted for by applying the modified pooling of interest method (IPSAS 40.15) when presenting the FS of the new reporting entity, whereas for an acquisition the use of the acquisition method in the CFS is prescribed (IPSAS 40.58). The differences between these methods primarily lie in the different valuation of assets and liabilities in the CFS as already addressed in Chapter 12. In Subsection 5.1, the application of the acquisition method is illustrated.

3. Overview about relevant IPSAS norms

Table 13.1 provides an overview about standards that are relevant for consolidated financial reporting according to IPSAS.

IPSAS	Scope	Evoluded from the scope	IFRS
IFSAS	эсоре	Excluded from the scope	basis
35 Consolidated financial statements	Preparation and presentation of CFS for the economic entity	 Accounting requirements for PSCs Postemployment benefit plans (IPSAS 39) Controlling entities that are investment entities 	IFRS 10
36 Investments in associates and joint ventures	Accounting for investments in associates and joint ventures by the investor leading to a quantifiable ownership interest	Investments that give not rise to a quantifiable ownership interest	IAS 28
37 Joint arrangements	Determining the type of joint arrangements and accounting for the rights and obligations of a joint operation		IFRS 11
38 Disclosure of interests in other entities	Disclosing information about interests in controlled consolidated and unconsolidated entities, joint arrangements and associates and unconsolidated structured entities	 Postemployment benefit plans (IPSAS 39) Separate financial statements (with exceptions) Interest in another entity that is accounted for in accordance with IPSAS 29 	IFRS 12
40 Public sector combinations	Accounting for PSCs, i.e. the bringing together of separate operations into one public sector entity	 Accounting for the formation of a joint arrangement in the FS of the joint arrangement The acquisition or receipt of an asset /group of assets assumption of a liability/ group of liabilities that do not constitute an operation The acquisition of investment entities 	IFRS 3

Table 13.1: Overview about IPSAS relevant for consolidation

The most relevant norms for consolidation can be found in IPSASs 35, 36 and 37. Each of these standards is effective since reporting periods beginning from 1st Jan 2017. Various methods of capital consolidation are available for offsetting the invested capital and the net assets between the entities. Which method is to be applied in which cases has not been specified in the IPSAS until IPSAS 40 became effective from 1st Jan 2019 onwards. Of course, the IPSAS conceptual framework serves as a guideline for the definition and measurement of the FS items, although its use is not mandatory.⁴

4. Process of consolidated financial reporting

From a legal and organisational perspective, the process of consolidated financial reporting for a public sector entity that presents IPSAS CFS comprises the following steps for initial consolidation:

- 1. IPSAS requirements for CFS (i.e. Check for control);
- **2. Definition of the consolidation area**⁵ (Which entities are to be included with which methods in the CFS?);
- 3. Development of a consolidated accounts manual in order to maintain uniformity, i.e. determination of the date of reporting and the group individual accounting policies with respect to recognition, measurement and disclosure;
- **4. Determination of responsibilities,** e.g. at the group level: revaluation (i.e. disclosure of hidden reserves and burdens), currency conversion of FS, consolidation procedures; decentral preparation of FS II;
- **5. Initial consolidation** by applying the consolidated accounts manual (Step 3) and completion of the required consolidation procedures.

⁴ See Chapters 1 and 8.

⁵ Also referred to as scope of consolidation.

In the subsequent reporting periods, the controlling entity:

- **6.** May **review** and **update** the consolidation area, consolidated accounts manual and responsibilities;
- 7. If no group accounting (booking) system exists: 6 repetition of all consolidation steps of previous reporting periods (i.e. initial consolidation and subsequent consolidation of the previous reporting periods) in order to achieve a status quo as at the end of the previous reporting period;
- **8. Implementation of the subsequent consolidation** for the current reporting period.

This section addresses the Steps 1-4, whereas Steps 1 and 2, i.e. the definition and boundaries of the economic reporting entity are explained in Subsection 4.1 and the principles of uniformity (as parts of the consolidated accounts manual and the responsibilities) are the topic of Subsection 4.2. In Subsection 4.3, an overview about the consolidation procedures adopting the full consolidation is shown (Steps 5-8) (see Figure 13.2).

4.1. Definition of the economic entity

A controlling public sector entity is required to present CFS (IPSAS 35.5). Therefore, an entity shall determine whether it controls another entity (IPSAS 35.18). According to IPSAS 35.20, the following three indicators need to be cumulatively fulfilled for control: The entity has

- a) Power over another entity;
- **b)** Exposure, or rights to variable benefits from its involvement with the other entity, and
- c) The **ability to use its power** to affect the nature or amount of the **benefits.**

⁶ This will be the usual case for public sector groups.

Power is defined as existing rights that give the controlling entity the current ability to **direct** the **relevant** financial and operating **activities** (IPSAS 35.24), that significantly affect the nature or amount of the benefits from its involvement with the controlled entity. The rights can lie in voting rights, e.g. granted by equity instruments, but also result from binding agreements. The controlling entity does not necessarily need to exercise those rights (IPSAS 35.27). However, rights such as regulatory control or economic dependence alone are not sufficient for power according to IPSAS 35.26.⁷

The **variable** (positive or negative) **benefits** can be of financial or non-financial nature and vary with the other entity's performance. Examples of **financial benefits** are the typical returns on investment such as dividends or similar distributions (IPSAS 35.32). **Non-financial benefits** can lie for example in specialised knowledge, improved or more efficient delivery of outcomes or a higher level of service quality (IPSAS 35.33).

The final criterion, the **link between power and benefits** means that the controlling entity has the ability to use its power to affect the benefits from its involvement (IPSAS 35.35). However, the mere existence of congruent objectives is insufficient, but it means that the controlling entity can direct the other entity to work further towards the controlling entity's objectives (IPSAS 35.36).

A controlling entity has to present CFS, but is **exempted from this obligation** if all of the following conditions are fulfilled (IPSAS 35.5): It

- a) Is itself a controlled entity (with conditions regarding the information needs of users and the approval of the other owners in cases of partially owned controlled entities);
- b) Does not trade own debt or equity instruments in the public market;
- c) Is not in the process of issuing any class of instruments in a public market, thereby it did not file or is not in the process of filing with the securities commission, and

 $^{^7}$ Budget dependence could be an alternative criterion to the control concept to define the consolidation area as explained in Chapter 12.

d) Has an ultimate or any intermediate controlling entity that produces publicly available FS that comply to IPSAS.

If a controlling entity presents CFS, it has to define the **consolidation** area in a narrow and a broad sense⁸ by clarifying different types of influence leading to relevant methods of consolidation as shown in Table 13.2.

Type of influence	Type of entity	IPSAS	Method of consolidation
Controlling influence	Controlled entity	35	Full consolidation
Joint controlling influence	Joint venture	36	Equity method
Significant influence	Associate entity	36	Equity method

Table 13.2: Overview of the IPSAS relevant for consolidation area

The definition of control was presented previously and the full consolidation according to IPSAS 35 is explained in Section 5. According to IPSAS 37.12, joint control is defined as "the sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control." A prerequisite is a binding agreement (IPSAS 37.10), which can be a contract or documented discussions between the parties, but also statutory mechanisms (IPSAS 37.8). A joint arrangement gives at least two parties joint control of the arrangement (IPSAS 37.10) and it can qualify as a joint operation or a joint venture (IPSAS 37.11). In a joint operation, the jointly controlling parties have rights to the assets, and obligations for the liabilities, relating to the arrangement (IPSAS 35.7). In contrast, for a joint venture, the parties do not belong to the same group (economic entity) and have rights to the net assets of the arrangement (IPSAS 35.7). The interest in a joint operation is, according to IPSAS 37.23, recognised (e.g. proportionately) in relation to its interest in the assets, liabilities, revenues, and expenses. However, it is not consolidated, but only recognised in the FS of the joint operator. In contrast, the investment in joint ventures shall

⁸ See Chapter 12.

be recognised in the CFS by the joint venturer using the equity method in accordance with IPSAS 36.

A public sector entity owns an interest in an **associate**, if **significant influence** exists, which means there "is power to participate in the financial and operating policy decisions of another entity, but it is not control or joint control of these policies" (IPSAS 36.8). Significant influence is assessed based on judgement on the nature of the relationship between the investor and investee. IPSAS 35 requires that the investor holds a quantifiable ownership interest. Significant influence can be **assumed** if the investor **holds** directly or indirectly **20% or more of the voting power** of the investee. If it holds less, it can be assumed that there is no significant influence unless the contrary can be demonstrated (IPSAS 36.11). Besides the voting power **other indicators** are e.g. the representation on the board of directors of the investee, participation in policy-making processes or interchange of managerial personnel (IPSAS 36.12). The investment in an associate is recognised by applying the **equity method** (IPSAS 36.16) with exemptions similar to IPSAS 35.5 (IPSAS 36.23).

Investments with no controlling influence, joint control or significant influence are to be recognised as financial instruments according to IPSAS 29, which is not further addressed in this chapter.

From the date the controlling entity obtains control, joint control or significant influence over another entity, the controlled entity, the joint venture and the associate have to be included in the CFS. The obligation to present CFS starts when the reporting entity becomes a controlling entity and ceases when the entity is no more a controlling entity (IPSAS 35.38). CFS present the group as a fictitious single entity. They therefore presuppose compliance with the uniformity principles.

4.2. Principles of uniformity

Before starting with the consolidation, the controlling entity needs to ensure that the FS of the entities to be consolidated conform to certain principles of uniformity. As described in Chapter 12⁹, the consolidated accounts manual prepared by the controlling entity can support this process. The principles of uniformity usually encompass:

- 1. Harmonisation of the reporting dates;
- 2. Uniform accounting policies (recognition, measurement and presentation), and
- 3. Foreign currency conversion.

According to IPSAS 35.46 the **(1) reporting dates** of the different FS and the CFS should be the same. If the reporting dates of the controlled entity differ, either a) an additional FS at the same date of the CFS needs to be prepared (for the purpose of consolidation only) or b) the most recent FS might be used by adjusting for effects of significant transactions occurred between the date of the FS and the CFS (IPSAS 35.46).

When preparing CFS, the controlling entity is required to use (2) uniform accounting policies "for like transactions and other events in similar circumstances" (IPSAS 35.38). Thereby, the consolidated entities are obliged to adopt these uniform accounting policies prescribed by (the accounting manual of) the controlling entity (IPSAS 35.41). This means, that the local FS (i.e. FS I) needs to be transformed into FS II conforming to the recognition, measurement and presentation policies adopted in the CFS.¹⁰ Although IPSAS 35.38 requires uniform accounting policies to be applied, there are no clear prescriptions that this also includes uniform presentation, such as the classification of the FS or item designations and assignment of assets and liabilities to balance sheet items. Under the fiction of the economic entity (IPSAS 35.14), an explicit regulation is basically unnecessary. Uniform presentation is therefore mandatory. IPSAS 1 and thus the explanations on the general features, structure and content of FS apply, i.e. the presentation of items must be maintained consistently (for all reporting periods) (IPSAS 1.42 f.).

⁹ See Chapter 12.4.

¹⁰ See Chapter 12 for further explanations about the different levels of FS.

The uniformity principle for accounting, measurement and presentation applies equally to real (explicit) and unreal (factual) options due to regulatory gaps, the interpretation of indefinite legal terms and the use of estimates or other discretionary decisions.

In case that the consolidation area also encompasses foreign controlled entities, a **(3) currency conversion** needs to be completed. Basically, the rules provided in IPSAS 4 need to be adhered.

After the uniformity of the FS has been ensured by presenting FS II for each entity to be consolidated, the Steps 1-4 described in the introduction of this Section 4 are completed and the actual consolidation process can start.

4.3. Overview about the process of full consolidation

Before explaining full consolidation in Section 5 and the equity method in Section 6, Figure 13.2 presents an overview about the process of full consolidation over two consecutive reporting periods¹¹ at the level of the balance sheet (BS). After preparing the BS II, when applying the acquisition method of capital consolidation (according to IPSAS 40), the assets and liabilities of the initially consolidated entities need to be revalued. This step of revaluation is not completed at the level of the group accounts, but at the FS level. Thereby the BS II are transformed into BS III of the initially consolidated entities. Afterwards, the BS items of all consolidated entities are added up line by line so that an aggregated BS results. From this, the consolidation procedures of full consolidation are implemented. As described in Step 7 of the process of consolidation, these consolidation procedures need to be repeated and updated in subsequent reporting years. This is depicted also in the Figure 13.2.

¹¹ By assuming that the reporting period equals the calendar year.

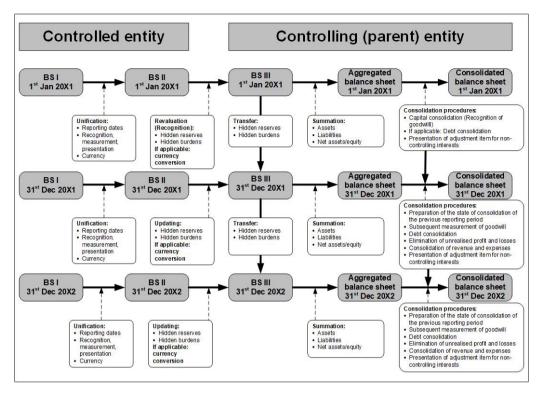


Figure 13.2: Process of full consolidation (Source: Lorson, Poller and Haustein, 2019)

5. Full consolidation (initial and subsequent consolidations)

IPSAS 35.40 describes the consolidation procedures for controlled entities. A full consolidation is to be carried out. This means that first, all like items of assets, liabilities, net assets/equity, revenue, expenses and cash flows of the controlling entity are combined with those of the controlled entities (IPSAS 35.40a). The items are added line by line and, as shown in Figure 13.2, an **aggregated** BS results. The second step is net assets/equity consolidation (also called **capital consolidation**) (IPSAS 35.40b), which is explained in Subsection 5.1. Finally, according to IPSAS 35.40c all intra-economic entity assets, liabilities, net assets/equity, revenue, expenses and cash flows relating to **transactions within the group** are to be eliminated, as described in Subsections 5.2-4. Each of these consolidation procedures

was already introduced in Chapter 12, so in this chapter the focus is on providing short examples.

5.1. Net assets/equity consolidation

As explained in Section 2, for PSCs that are categorised as acquisition, the acquisition method of accounting is to be used for initially recognising the investment (IPSAS 40.58). It is divided into four steps (IPSAS 40.59):

- a) Identification of the acquirer;
- b) Determination of the acquisition date;
- c) Recognition and measurement of identifiable assets received and liabilities assumed and non-controlling interests (NCI) in the operation acquired;
- d) Recognition and measurement of goodwill, a gain or loss from an acquisition.

First, the acquirer must be identified as the party to the acquisition that obtains control of the transferred operations (IPSAS 40.60). Second, the acquisition date is the date on which control was obtained (IPSAS 40.62). This is generally (and latest) the date of the legal transfer of the consideration paid for the acquisition of the ownership rights and/or the transferred assets and liabilities (IPSAS 40.63).

The acquisition method means that the identifiable assets acquired and the liabilities assumed are to be measured at their acquisition date fair values (IPSAS 35.72). Therefore, the assets and liabilities of the initially consolidated controlled entity need to be revalued and reported separately from goodwill (IPSAS 40.59 (c)). Due to public sector specifities, exceptions were made for recognition, initial and subsequent measurement of assets and liabilities that result from non-exchange transactions (IPSAS 40.75ff.). There are exceptions for

• Recognition, here contingent liabilities (IPSAS 40.76);

- Recognition and measurement, here taxation items (e.g. waived as part of the acquisition; IPSAS 40.78f.), liabilities and assets from employee benefits (if any; IPSAS 40.80), indemnification assets (IPSAS 40.81f.), and
- Measurement, here reacquired rights (IPSAS 40.83) and share-based payment transactions (IPSAS 40.83).

For non-controlling interests (NCI)¹² (IPSAS 40.59 c), a choice can be made between the revaluation method¹³ and the full goodwill method (IPSAS 40.73). In the latter case, the fair value of the NCI can be determined on the basis of a market price quotation on an active market or, if not available, using valuation techniques (IPSAS 40 AG91). An extrapolation based on the price per share or on the purchase price of the acquirer could be inappropriate, as an acquirer may, among other things, include a control premium (IPSAS 40 AG92).

Finally, in step d), the controlling entity's interest in the acquired entity (i.e. the consideration paid) is offset against the controlled entity's share of net assets attributable to the controlling entity and recognised as a difference (IPSAS 40.59 (d)). Any excess of (a) the cost of acquisition over (b) the fair value of net assets acquired is recognised as **goodwill** to the extent that the acquisition will result in future positive cash flows or reduced cash outflows to the acquirer (IPSAS 40.86). Differences in excess of (b) over (a) (i.e. a badwill or a **bargain purchase**) must be recognised – after a review (IPSAS 40.90) – as a loss in surplus or deficit (IPSAS 40.86). Goodwill related to service potential without payment validity is not to be recognised (IPSAS 40 AG93). In subsequent periods, goodwill must not be amortised, but tested for impairment in accordance with IPSAS 26 Impairment of Cash-Generating Assets (IPSAS 26.76-97).

A public sector characteristic is an acquisition without payment of a consideration (e.g. forced nationalisations or bequests). In these cases, any gain or loss arising from the acquisition is to be recognised in surplus

¹² See Chapter 12.3.

¹³ Also called partial goodwill method.

or deficit (IPSAS 40.94). Expenses incurred for the purpose of acquiring (another) operations are recognised as expenses in surplus or deficit when they arise (IPSAS 40.111).

In the following, examples are drawn to show the case of 100% ownership with the initial and subsequent consolidation (Examples 1 and 2) and a case of 80% ownership, i.e. with NCI, (Examples 3 and 4) by applying the full goodwill method. Only the effects on the balance sheet are shown, so no separate accounting records for the statement of financial performance are presented.¹⁴

Example 1: Net assets/equity initial consolidation without NCI

On 1st Jan 20X1, the municipality Eucity acquires 100% of the company CE (controlled entity) for 100 kEUR. Eucity gains control of CE. The PSC is an acquisition according to IPSAS 40.5. The simplified balance sheets (BS) II of both entities, which comply to the consolidated accounts manual, are shown in Table 13.3.

Eucity (BS II)				
1 st Ja	n 20X	1 in kEUR		
A4-	Net assets &			
Assets		liabilities		
PPE	800	Reserves	300	
Investment	100	Surplus	100	
Inventories	50	Liabilities	550	
Total	950	Total	950	

CE (BS II)					
1 st Jan 20X1 in kEUR					
Net assets &					
Assets		liabilities			
PPE	250	Reserves	40		
Inventories	100	Surplus	10		
Cash	50	Liabilities	350		
Total	400	Total	400		

Table 13.3: Balance sheets II of Eucity and CE at initial consolidation date

At 1st Jan 20X1, a scan of CE's accounted assets and liabilities regarding an appropriate measurement unveiled the following issues:

- The fair value of property, plant, and equipment (PPE) is 300 kEUR with a useful life of 5 years and a straight-line depreciation.
- The fair value of inventories is 110 kEUR.
- The liabilities are understated. An additional amount of 20 kEUR will be needed to settle the liabilities.

¹⁴ This would be necessary, if no group IT booking system exists.

The net assets/capital consolidation as part of initial consolidation is to be carried out.

At initial consolidation, according to the acquisition method, the acquirer (Eucity) and the acquisition date (1st Jan 20X1) have been determined. Next, the controlled entity's identified assets and liabilities are to be measured at fair value. There are hidden reserves of 50 kEUR in PPE and 10 kEUR in inventories and 20 kEUR of hidden burdens in the liabilities. A revaluation gain is not to be recognised in surplus and deficit but directly through net assets (in a revaluation reserve).¹⁵ The combined accounting record is as follows:

Debit		to	Credit	
PPE	50 kEUR	4-	Liabilities	20 kEUR
Inventories	10 kEUR	to	Revaluation reserve	40 kEUR

The revalued assets and liabilities of CE are shown in the level III balance sheet (BS III) in Table 13.4. In the aggregated BS (right column), the items of the consolidated entities are added up after the revaluation of CE. Thus, for Eucity (the controlling entity) the BS II is used, whereas for CE (the controlled entity) the BS III is added. A full consolidation is applied, i.e. the BS items are added in their total amounts.

Item	Eucity	CE	Revaluation		CE	Aggregated
in kEUR	BS II	BS II	Debit	Credit	BS III	BS
PPE	800	250	50		300	1,100
Investment in CE	100	0			0	100
Inventories	50	100	10		110	160
Cash	0	50			50	50
Total assets	950	400			460	1,410
Reserves	300	40		40	80	380
Surplus	100	10			10	110
Liabilities	550	350		20	370	920
Total net assets	950	400	60	60	460	1,410
& liabilities						

Table 13.4: Example 1: Determination of the aggregated balance sheet at 1st Jan 20X1 in kEUR

¹⁵ For this and the following examples, deferred tax is neglected because it depends on national tax systems and probably public entities will not be subject to tax.

However, the aggregated BS cannot serve as the consolidated BS, as there is double counting: the carrying amount of the investment of Eucity in CE on the asset side and the net assets/equity of CE acquired by Eucity are both in the aggregated BS. Net assets/equity consolidation is now performed by derecognizing the shares held by the controlling (parent) entity (carrying amount of investment) against the revalued equity of the CE. The revalued net assets are calculated as follows:

Reserves	40 kEUR
+ Surplus	+ 10 kEUR
= Balance sheet net assets of CE	= 50 kEUR
+/ - Hidden reserves/burdens (+60 kEUR / - 20 kEUR)	+ 40 kEUR
= Revalued net assets of CE	= 90 kEUR

The revalued net assets are offset against the carrying amount of the investment of Eucity in CE. The resulting positive difference is to be capitalised as goodwill based on the expectation of positive future net cashflows:

= Goodwill	= 10 kEUR
– Revalued net assets of CE	- 90 kEUR
Investment of Eucity in CE (consideration transferred)	100 kEUR
Instantant of Essites in CE	

Net assets/equity consolidation is completed by the following accounting record within the consolidated BS shown in Table 13.5. Only the net assets of Eucity remain and the item with the investment of Eucity in CE is derecognised. The new asset item "goodwill" is added:

Debit		to	Credit	
Reserves	80 kEUR			
Surplus	10 kEUR	to	Investment in CE	100 kEUR
Goodwill	10 kEUR			

Item	Aggregated	Consolidation records		Consolidated
in kEUR	BS	Debit	Credit	BS
PPE	1,100			1,100
Goodwill	0	10		10
Investment in CE	100		100	0
Inventories	160			160
Cash	50			50
Total assets	1,410			1,320
Reserves	380	80		300
Surplus	110	10		100
Liabilities	920			920
Total net assets &	1,410	100	100	1,320
liabilities				

Table 13.5: Example 1: Consolidation table at 1st Jan 20X1

Example 2: Net assets/equity subsequent consolidation without NCI

After one year, on 31th Dec 20X1, the subsequent consolidation is to be performed. The BS II of both entities are the following:

Eucity (BS II)					
31st D	ec 20X	1 in kEUR			
A 4 -	Net assets &				
Assets		liab	ilities		
PPE	800	Reserves	300		
Investment	100	Surplus	100		
Inventories	50	Liabilities	550		
Total	950	Total	950		

CE (BS II)				
31st Dec 20X1 in kEUR				
Net assets &				
Assets		liabilities		
PPE	250	Reserves	50	
Inventories	100	Surplus	40	
Cash	50	Liabilities	310	
Total	400	Total	400	

Table 13.6: Balance sheets II of Eucity and CE at subsequent consolidation date

At the end of the reporting period (i.e. 31st Dec 20X1), the hidden reserves in the inventories have been realised, and the acquired surplus has been transferred to the reserves of CE. A surplus of 40 kEUR has

been earned by CE in the reporting period 20X1 and in the same amount liabilities have been repaid. Still, the hidden burdens in the liabilities of 20 kEUR remain. The net assets/capital consolidation as part of subsequent consolidation is to be completed.

Before starting with the actual subsequent consolidation, the initial consolidation is to be carried forward and has to be advanced. The repetition of the initial consolidation is necessary, because there is no group accounting (booking) system and both entities again provide their FS as of 31st of December 20X1 for consolidation. As such, first the revaluation of assets and liabilities has to be repeated. The accounting record is as follows:

Debit	oit		to Credit	
PPE	50 kEUR		Liabilities	20 kEUR
Inventories	10 kEUR	to	Revaluation reserve	40 kEUR

As described above, the hidden reserves in the inventories do not exist anymore (-10 kEUR). Also, the hidden reserves in the PPE have a limited useful life of five years and therefore have to be depreciated: ¹⁶ 50 kEUR / 5 years = 10 kEUR. Thus, a second accounting record is needed whereas in subsequent consolidation, the realisation of hidden reserves is to be accounted for respectively neutralized in surplus or deficit:

Debit	to		Credit	
Surplus	20 kEUR	4_	PPE	10 kEUR
		to	Inventories	10 kEUR

Again for CE the BS III is created, based on which the aggregated BS is shown in Table 13.7:

¹⁶ See Chapters 10 and 11 for explanations about depreciation.

Item	Eucity	CE	Revaluation		Revaluation CE	
in kEUR	BS II	BS II	Debit	Credit	BS III	BS
PPE	800	250	50	10	290	1,090
Investment in CE	100	0			0	100
Inventories	50	100	10	10	100	150
Cash	0	50			50	50
Total assets	950	400			440	1,390
Reserves	300	50		40	90	390
Surplus	100	40	20		20	120
Liabilities	550	310		20	330	880
Total net assets & liabilities	950	400	80	80	440	1,390

Table 13.7: Example 2: Determination of the aggregated balance sheet at 31st Dec 20X1

Also the initial net assets/equity consolidation is repeated, thereby taking into account, that for CE the initially consolidated surplus is now part of the reserves. Therefore, the accounting record slightly changes:

Debit		to	Credit	
Reserves	90 kEUR		Investment in CE	100 kEUR
Goodwill	10 kEUR	to		

An annual impairment test has to be performed for the cash-generating unit to which the goodwill has been allocated (IPSAS 26.90F), but no impairment loss incurred. The consolidation table is shown in Table 13.8.

Item	Aggregated	Consolidati	on records	
in kEUR	BS	Debit	Credit	Consolidated BS
PPE	1,090			1,090
Goodwill	0	10		10
Investment in CE	100		100	0
Inventories	150			150
Cash	50			50
Total assets	1,390			1,300
Reserves	390	90		300
Surplus	120			120
Liabilities	880			880
Total net assets & liabilities	1,390	100	100	1,300

Table 13.8: Example 2: Consolidation table at 31st Dec 20X1

The previous Examples 1 and 2 have drawn a case, in which the controlling entity holds 100% of the ownership rights of the controlled entity. The following Examples 3 and 4 use the same case for showing the accounting treatment of NCI when applying the full consolidation method.

Example 3: Net assets/equity initial consolidation with NCI

On 1st Jan 20X1, the municipality Eucity acquires 80% of the company CE (controlled entity) for 100 kEUR. All other information provided in Example 1 applies, with the BS II shown in Table 13.3.

The net assets/capital consolidation as part of initial consolidation is to be completed. It is known that the fair value of the NCI on 1st Jan 20X1 is 25 kEUR.

As the first step of the initial consolidation, the revaluation of assets and liabilities is to be completed.

Debit		to	o Credit	
PPE	50 kEUR	4-	Liabilities	20 kEUR
Inventories	10 kEUR	to	Revaluation reserve	40 kEUR

Also in this case, the aggregated BS is compiled from the BS II of Eucity and the BS III of CE. Again a full consolidation is carried out. This means although Eucity only acquired 80% of CE, the asset and liability items are added in full in the aggregated BS as shown in Table 13.4. For derecognizing the carrying amount of the investment against the revalued net assets of CE, the ownership share of Eucity needs to be considered. This step differs from the one presented in Example 1.

Reserves	40 keur	
+ Surplus	+ 10 kEUR	
= Balance sheet net assets of CE	= 50 kEUR	
+/ - Hidden reserves/burdens	. 40 1-EUD	
(+60 kEUR / - 20 kEUR)	+ 40 kEUR	
= Revalued net assets of CE	= 90 kEUR	
of which Eucity group share (80%)	72 kEUR	

The carrying amount of the investment of Eucity in CE is offset against the revalued net assets. A positive difference results, that is to be capitalised as goodwill based on the expectation of increased future net cash flows. This goodwill is only associated to Eucity group:

= Goodwill	= 28 kEUR
- Revalued net assets of CE	- 72 kEUR
(consideration transferred)	
Investment of Eucity in CE	100 kEUR

Besides the accounting records for offsetting the investment of Eucity in CE against Eucity's share on the net assets of CE (80% of 80 kEUR net assets and of 10 kEUR surplus), also the NCI need to be recorded. Thus, a second accounting record is necessary in order to show the NCI in the consolidated BS separately.

Debit		to	Credit	
Reserves	64 keur			
Surplus	8 kEUR	to	Investment	100 kEUR
Goodwill	28 kEUR			

Debit		to	Credit	
Reserves	16 keur		Non-controlling interests	18 kEUR
Surplus	2 kEUR	to		

According to IPSAS 40.73, NCI can either be measured at a) fair value (full goodwill method) or b) "at the present ownership instruments' proportionate share in the recognised amounts of the acquired operation's identifiable net assets" (partial goodwill method). In the latter case, no further accounting records are needed. If the full goodwill method is applied, the NCI is to be adjusted for their fair value, which is according to the case description 25 kEUR. A difference of 7 kEUR (25 kEUR fair value –

18 kEUR non-controlling interest) results, which is recognised as goodwill. Thus, a further accounting record is needed. The consolidation Table 13.9 shows the results for the initial net assets/equity consolidation in the case of the 80% ownership.

Debit		to	Credit	
Goodwill	7 kEUR	to	Non-controlling interests	7 keur

Item	Aggregated	Consolidati	on records	0 111 1 100
in kEUR	BS	Debit	Credit	Consolidated BS
PPE	1,100			1,100
Goodwill	0	28 7		35
Investment in CE	100		100	0
Inventories	160			160
Cash	50			50
Total assets	1,410			1,345
Reserves	380	64 16		300
Surplus	110	8 2		100
Non-controlling interests	0		18 7	25
Liabilities	920			920
Total net assets & liabilities	1,410	125	125	1,345

Table 13.9: Example 3: Consolidation table at 1st Jan 20X1

Example 4: Net assets/equity subsequent consolidation with NCI

Like in Example 2, after one year, on 31th Dec 20X1, the subsequent consolidation is to be performed, now for Eucity's ownership share of 80%. The same information as in Example 2 applies, with the BS II shown in Table 13.6. In addition, it is known that the fair value of the non-controlling interests on 31st Dec 20X1 is 30 kEUR. The net assets/capital consolidation as part of subsequent consolidation is to be carried out.

Again, the initial consolidation is to be carried forward and has to be advanced. Thus, the accounting records of revaluation are repeated and adjusted to the information provided at the end of the reporting period:

Debit		to	Credit	
PPE	50 kEUR		Liabilities	20 kEUR
Inventories	10 kEUR	to	Revaluation reserve	40 kEUR

Debit		to	Credit	
Surplus	20 kEUR	4-	PPE	10 kEUR
		to	Inventories	10 kEUR

So far, there are no differences in the accounting treatment between a case with and without NCI so that the aggregated BS is the same as shown in Table 13.7. Now, the initial net assets/equity consolidation is repeated, keeping in mind that CE's initially consolidated surplus is now part of the reserves. By applying the full goodwill method, the goodwill of the non-controlling interest is adjusted to the fair value at the acquisition date (25 kEUR) and not updated to the fair value at the reporting date. The accounting records for the Eucity group and the NCI are:

Debit		to	Credit	
Reserves	72 kEUR	+0	Investment	100 kEUR
Goodwill	28 kEUR	to		

Debit		to	Credit	
Reserves	18 kEUR	to	Non-controlling	18 kEUR
		-	interests	

Debit		to	Credit	
Goodwill	7 kEUR	to	Non-controlling interests	7 kEUR

With respect to subsequent consolidation, it is of importance to regard that the NCI participate by 20 % in the surplus of CE (20 kEUR, BS III value)

of the accounting period 20X1 as recorded below. The consolidation is shown in Table 13.10.

Debit		to	Credit	
Surplus	4 kEUR	to	Non-controlling	4 keur
Surpius	4 KEUK	10	interests	4 KEUK

Item	Aggregated	Consolidati	on records	
in kEUR	BS	Debit	Credit	Consolidated BS
PPE	1,090			1,090
Goodwill	0	28 7		35
Investment in CE	100		100	0
Inventories	150			150
Cash	50			50
Total assets	1,390			1,325
Reserves	390	72 18		300
Surplus	120	4		116
Non-controlling interests	0		18 7 4	29
Liabilities	880			880
Total net assets & liabilities	1,390	129	129	1,325

Table 13.10: Example 4: Consolidation table at 31st Dec 20X1

5.2. Debt consolidation

Debt consolidation is a further consolidation procedure introduced in Chapter 12. According to the entity fiction, a group cannot have mutual liabilities and receivables, so these have to be eliminated. If intra-economic entity liabilities and receivables already existed at the date of initial consolidation, debt consolidation needs to be carried out. Otherwise, debt consolidation is applied during subsequent consolidation, when the consolidated entities realised economic transactions in their individual FS

that led to mutual liabilities and receivables. Usually, intra-economic entity liabilities and receivables will have equal amounts, but in some cases offset differences can occur. ¹⁷ Two examples are introduced subsequently. In each of the following examples (also for all subsequent subsections) it is assumed that Eucity owns 100% of CE since 1st Jan 20X1 and the reporting period equals the calendar year.

Example 5: Debt consolidation without offset differences

On 15th Nov 20X1, Eucity ordered goods of CE and made an advance payment for the delivery in 2 months in the amount of 50 kEUR (at no interest). Eucity has recognised the transaction as current receivable and CE as current liability, each with 50 kEUR. The debt consolidation is to be carried out on 31th Dec 20X1.

In this case, receivables and liabilities have the same amount, so there are no offset differences. The elimination is realised with the following accounting record:

Debit		to	Credit	
Current liabilities	50 kEUR	to	Current receivables	50 kEUR

Example 6: Debt consolidation with offset differences

On 20th May 20X1, Eucity lent its controlled entity CE money to be repaid after three years. Eucity has recognised the transaction as non-current receivables and CE as non-current liabilities at 100 kEUR. However, due to pessimistic expectations at the end of 20X1, Eucity has written off its claim in its individual FS by 8 kEUR in surplus or deficit. The debt consolidation is to be conducted on 31th Dec 20X1.

Due to the write-down of the receivables, the items do not have same amount, so there is a real offset difference¹⁸. The transaction is eliminated, as if it had not taken place:

¹⁷ Explained in Chapter 12.

¹⁸ See the explanation of real and unreal offset differences in Chapter 12.6.

Debit		to	Credit	
Current liability	100 kEUR		Current receivable	92 kEUR
		to	Surplus (Impairment loss)	8 kEUR

5.3. Consolidation of revenue and expenses

As the group can only realise revenue and expenses with outside parties, all related economic transactions that led to intra-economic entity income or expenses, have to be eliminated. The consolidation of revenue and expenses is not carried out during initial consolidation, but only during subsequent consolidation.

Example 7: Consolidation of revenue and expenses

Eucity rented some rooms of CE's building. For the use during the last 3 months, Eucity paid 1 kEUR/month to CE. The consolidation of revenue and expenses is to be conducted on 31th Dec 20X1, here at the level of the consolidated statement of surplus or deficit (profit and loss statement):

Debit		to	Credit	
Rental income	3 kEUR	to	Rental expenses	3 kEUR

5.4. Elimination of unrealised gains or losses

In the economic entity, consolidated entities might mutually exchange deliveries and services. Here, the valuation of the assets sold and received will differ, making an adjustment necessary. Therefore, gains (i.e. profits) and losses based on inter-economic entity deliveries and services that have not yet been realised with third parties must be eliminated from the CFS and the values of these assets must be adjusted. In the consolidated accounts manual, a common measurement basis will be defined.

Example 8: Elimination of unrealised gains for inventories

Eucity purchased and already paid inventories, which were delivered by CE in 20X1. The inventories were further processed by Eucity, but not yet given to third parties. The sales price of CE was (value at FS of Eucity) 45 kEUR. The cost of the inventory (measured in compliance with the group accounting manual) was 38 kEUR. The elimination of unrealised profits or losses is to be carried out on 31th Dec 20X1.

On the one hand unrealised gains have been recorded (7 kEUR = 45 kEUR – 38 kEUR) and the value of the related inventories is to be decreased at the BS level. In addition, in the statement of financial performance, the revenue and expenses are to be eliminated, so that the surplus is matched:¹⁹

Debit		to	Credit	
Surplus	7 kEUR	to	Inventories	7 kEUR
Revenues	45 kEUR	4-	Cost of materials	38 kEUR
		to	Surplus	7 kEUR

If in this case, there is an ownership share of less than 100%, i.e. there would be NCI, further accounting records for assigning their part of the adjusted surplus to the NCI are needed as well.

Example 9: Elimination of unrealised gains for depreciable PPE

On 1st Jan 20X1, Eucity purchased and already paid a machine, which was produced by CE in 20X1. The machine is used by Eucity and has a useful life of five years with a straight-line depreciation. The sales price of CE was 45 kEUR (= book value of Eucity). The cost of the machine (measured in compliance with the group accounting manual) was 38 kEUR (= book value per unit in CE's inventory of finished products).

¹⁹ Separate accounting records for the balance sheet and the statement of financial performance are illustrated here, because it is assumed that there is no group accounting system and both FS have to be booked separately.

The elimination of unrealised profits or losses is to be carried out on 31th Dec 20X1.

On the one hand unrealised gains have been recorded (7 kEUR = 45 kEUR – 38 kEUR) and the value of the related machine is to be decreased at the BS level. In addition, in the statement of financial performance, the revenue and expenses are to be eliminated, so that the surplus is matched: Also, it needs to be regarded that the machine was depreciated in 20X1 by Eucity at 9 kEUR (45 kEur / 5 years). However, at the group level, the depreciation would only be 7.6 kEUR (38 kEUR / 5 years). Therefore in contrast to Example 8, besides the elimination of revenue for the purchase of the machine, also the difference in depreciation (1.4 kEUR) needs to be reversed at the BS level and in the statement of financial performance:²⁰

Debit		to	Credit	
Surplus (BS)	7 kEUR	to	Machine	7 kEUR
Revenue	45 kEUR		Expenses (Reduction in the inventory of finished products)	38 kEUR
			Surplus	7 keur
Machine	1.4 kEUR	to	Surplus (BS)	1.4 kEUR
Surplus	1.4 kEUR	to	Depreciation expenses	1.4 kEUR

Again, as in an Example 8, if there would be NCI, further adjustments would be necessary.

²⁰ Separate accounting records for the balance sheet and the statement of financial performance are illustrated here, because it is assumed that there is no group accounting system and both FS have to be booked separately.

6. Equity method (initial and subsequent consolidations)

The equity method is an alternative consolidation method to be used for **associates** (IPSAS 36.16) and **joint ventures** (IPSAS 37.28). The application of the equity method also requires the existence of uniformly valued FS throughout the group (IPSAS 36.37). In the CFS, an investment in an associate or a joint venture accounted for using the equity method shall be classified as non-current assets (IPSAS 36.21).

Initially, the investment is measured at cost. However, in an auxiliary calculation, the difference between the pro-rata net assets of the associate/joint venture and the revalued net assets (book net assets plus hidden reserves and burdens) is calculated. A resulting goodwill is not recognised (IPSAS 36.35a), whereas an excess of the entity's net fair value of the identified assets and liabilities over the costs of the investment are accounted for as revenue in surplus or deficit (IPSAS 36.35b).

In subsequent reporting periods, this book value of the investment is adjusted by the surplus (profit) or deficit (loss) attributable to the investor (IPSAS 36.16). Thus, in contrast to full or proportionate consolidation, the investment in associates or joint ventures is not replaced in the consolidated BS by the underlying assets and liabilities. Instead, the carrying amount of the investment (i.e. the consideration paid) recognised in the consolidated BS is adjusted for the changes in net assets (equity) attributable to the investor, so that over time it approximates the fair value of the investment in an associate or joint venture. Similarly, the consolidated statement of financial performance does not include any income items of the associated company or joint venture. Rather, gains are only reflected summarily in the financial results. Thus, the main activity for the investor of each associate is recording surplus (profits) or losses and dividends of the associate or joint venture.²¹

For subsequent consolidation, a general structure for the adjustment of the book value according to the equity method is shown in Table 13.11. In the structure, a distinction is drawn between adjustments that were realised through surplus and deficit and those that were not.

²¹ Krimpmann (2015), pp. 278 ff.

	Book value of investment in associates /					
Starting point	joint ventures at beginning of reporting period					
	+ Pro-rata surplus of the associate or joint					
	venture - Pro-rata deficit of the associate or joint venture - Pro-rata dividend paid					
	- Depreciation on hidden reserves and					
Adjustments through	identified assets of the initial recognition					
surplus or deficit	+ /- Adjustment of hidden burdens					
•	+ / - Alignment of the associates / joint					
	ventures balance sheet items to the group's					
	accounting policies affecting net income					
	+ / - Deferred taxes on depreciation and					
	adjustments (if applicable)					
	+ / - Revaluations and adjustments of property,					
	plant and equipment that not are recorded					
	by the associate or joint venture through					
Adjustments through	surplus or deficit (i.e. due to use of revaluation					
net assets	method)					
(i.e. not through	+ / - Changes in the participation quota that					
surplus and deficit)	result from any under- or over proportionate					
	increases or decreases in net assets					
	+ / - Capital contributions done by the investor /					
	paid to the investor					
	= Book value of investment in associates /					
	joint ventures at end of reporting period					

Table 13.11: Adjustment of the investment book value according to the equity method²²

Due to the procedure described above, the equity method is rather perceived as a method of revaluation instead of being a true consolidation method.²³ Net assets/equity consolidation is completed through the revaluation of the investment book value described previously. However, inter-economic entity transactions with associates and joint ventures, with some exceptions, can also be subject of debt consolidation and elimination

²² See e.g. Krimpmann (2015), pp. 427.

²³ Stolowy and Lebas (2006), p. 468.

of unrealised gains and losses (IPSAS 36.29 ff.). However, differences may lie in the consolidation of, for example gains and losses from downstream and upstream transactions (see IPSAS 36.31), which however are not explained in detail here.²⁴

Example 10: Application of the equity method

On 1st Jan 20X1, Eucity acquired 25% of the shares in the company AE (associated entity). The acquisition costs were 50 kEUR. The book value of AE's equity at the time of acquisition was 120 kEUR. At the time of acquisition, there were hidden reserves of 32 kEUR in PPE with a remaining useful life of 5 years. In 20X1, AE closed the accounts with a deficit of 8 kEUR and a distribution of dividends of 4 kEUR. The associate is to be recognised at initial recognition and subsequently measured on 31st Dec 20X1.

The investment in an associate is recognised at cost:

Acquisition cost	50 kEUR
- Pro rata net assets acquired (25% of 120 kEUR)	30 kEUR
= Difference	20 kEUR
- Pro-rata hidden reserves (25 % of 32 kEUR)	8 kEUR
= Goodwill	12 kEUR

The book value of the investment equals the acquisition cost in the amount of 50 kEUR. The pro rata hidden reserves and also the goodwill are not recognised separately in the consolidated BS, but forwarded in auxiliary calculations. The recognition (e.g. by bank payment) is booked as follows:

Debit		to	Credit	
Investments in	50 kEUR	to	Rank	50 kEUR
associates			Dank	JO KLOK

 $^{^{24}\,}$ See for detailed explanations e.g. Krimpmann (2015), pp. 450 ff.

For subsequent measurement of the book value of the investment on 31st Dec 20X1, the relevant parts of the calculation presented in Table 13.11 have to be inserted as shown below:

Acquisition cost	50 kEUR	
= Investment book value 1 st Jan 20X1	50 KEUK	
- Pro rata deficit (25% of 8 kEUR)	2 kEUR	
- Pro rata dividend paid (25% of 4 kEUR)	1 kEUR	
- Pro rata depreciation of hidden reserves (25% of 32 kEUR/5 years)	1.6 keur	
= Investment book value 31st Dec 20X1	45.4 kEUR	

The book value of the investment is to be adjusted. Addition, the need for further impairment loss is to be determined by applying IPSAS 29 (IPSAS 36.43).

The accounting records for the reduction of the book value and the received dividend payment are shown below. Thus, the net result is a loss of 3.6 kEUR from the investment in associates. Finally, the reduction of the book value from this investment is partially compensated by an increase in bank accounts.

Debit		to	Credit	
Deficit of associates accounted for using the equity method	4.6 keur	to	Investments in associates	4.6 keur
Bank	1 kEUR		Surplus of associates accounted for using the equity method	1 kEUR

7. Conclusion

The aim of this chapter was to explain consolidated financial reporting according to IPSAS with a specific focus on the consolidation methods and procedures. It was shown that controlling entities are to be fully

consolidated, whereas investments in associates and joint ventures are to be consolidated using the equity method. As the proportionate consolidation is not allowed in IPSAS, this consolidation method was not addressed.

In explaining the consolidation methods, this chapter presented short examples. However, given the introductory character of this chapter, these examples where rather basic. Still, after completion of this chapter readers should be able to explain the basic techniques of consolidation.

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Discussion topics

- Relevance of accounting for goodwill in the public sector and its interpretation
- Relevance of the full goodwill method in public sector accounting
- Typical examples of public sector specific revenue and expenses and unrealised gains and losses