2008 SNA Update

Wellbeing and Sustainability Task Team (WSTT)

Inter-secretariat Working Group on National Accounts

ENDORSED

WS.9 Recording of Provisions

Recording of provisions

2008 SNA update – Guidance Note WS.9

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Recording of provisions[1]

SECTION 1: THE ISSUE

BACKGROUND

1. During the 2008 System of National Accounts (2008 SNA) update, the issue of provisions was firstly examined by the Wellbeing and Sustainability Task Team (WSTT). This was because natural resource asset values may be affected by the existence of provisions in the balance sheets of mining companies, for example decommissioning costs. Eventually, the issue of provisions emerged also in other guidance notes (GNs), i.e., those on retained earnings, unlisted equity and valuation of loans. This version of the GN provides a wider view on the possible treatment of provisions in the updated 2008 SNA/Balance of Payments Manual 6 (BPM6). The 2008 SNA research agenda (Annex 4, D.4) warrants such GN since the (non)recording of provisions represents a conceptual deviation of the SNA from the accounts of businesses and public entities. The conclusion of the above-referred to GNs is not to change, but to explicate the treatment of provisions in the next versions of the BPM and the SNA. To this end, this GN proposes to include a supplementary table providing more detailed information on provisions. Furthermore, it includes recommendations on the recording of terminal costs, the recognition of compensation costs, and the recording of stranded assets.

2. The research agenda of the 2008 SNA addresses the issue of provisions (paragraphs A4.41 - A4.43) as follows:

"In business accounting, there are three degrees of "promises": liabilities, provisions and contingent liabilities. Their definitions are the following.

a. A liability is a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits or service potential.

b. A provision is a liability of uncertain timing or amount.

c. A contingent liability is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

In the SNA, liabilities and provisions relating to financial instruments are generally recognized in the main accounts only if there is a corresponding financial asset of equal value held by a counter-party. However, it is recommended that certain provisions that do not satisfy this criterion, such as

[1] Prepared by Mark de Haan (IMF) and the Task Team on Wellbeing and Sustainability. Contributions from João Fonseca and Peter van de Ven were indispensable. Also, comments received from several IMF colleagues and AEG members are greatly acknowledged.

those for non-performing loans, should be recorded as memorandum items. Contingent liabilities are not recognized at all in the core accounts, except in the case of standardized guarantees.

The problem is that recognition of a reduction in the value of an asset in the SNA necessarily implies a reduction in the corresponding liability but the asset holder may not wish to reveal to the counter-party the fact that they regard some of the claim as uncollectable. Not doing so however overstates the value of the assets."

3. The paragraphs A4.41 - A4.43 in the 2008 SNA discuss provisions only in the context of the financial accounts. However, in business accounting, on the debit side, provisions may enter the profit and loss account. Guidance note D.16 on the treatment of retained earnings shows that, particularly for the financial sector, obtaining information on provisions is crucial when determining SNA defined income and retained earnings. Contrary to business accounting, according to the 2008 SNA, income is not corrected for any (changes in) provisions.

4. Paragraph 11.130 of the 2008 SNA recommends identifying transactions related to nonperforming loans as memorandum items in the financial accounts. When they are important it may be useful to group all arrears of interest and repayment under a memorandum item. Non-performing loans are in paragraph 13.66 of the 2008 SNA defined as follows:

"A loan is non-performing when payments of interest or principal are past due by 90 days or more, or interest payments equal to 90 days or more have been capitalized, refinanced, or delayed by agreement, or payments are less than 90 days overdue, but there are other good reasons (such as a debtor filing for bankruptcy) to doubt that payments will be made in full."

5. Of course, the presence of provisions for nonperforming loans may be a clear indication of their existence. Otherwise, the existence of nonperforming loans according to the above definition does not mean provisions have been put into place.

6. Except for provisions for calls under standardized guarantees, the 2008 SNA does not recognize provisions. Standardized guarantees imply that under certain conditions, loans may be canceled. For example, loans to students which are guaranteed by governments may eventually be canceled in case later in their professional careers, earnings remain under a certain threshold.

7. Paragraph 13.79 of the 2008 SNA explains the recording of provisions for calls under standardized guarantees as follows:

"The value to be entered in the balance sheet for provisions for calls under standardized guarantees is the expected level of claims under current guarantees less any expected recoveries. Strictly speaking, these amounts will represent a degree of double counting in the assets of the units benefiting from the guarantees. For example, if financial institutions make 1 000 loans of 20 each that are covered by guarantees and 10 are expected to default, the value of the loans made is still shown as 20 000 and in addition the lenders have an asset of 200 in respect of the expected calls under the guarantee. However, the unit offering the guarantee has a liability of 200 with no matching asset so the net worth for the whole economy is not overstated."

8. Despite any concern of double counting, the example shows that in case of a standardized guarantee, the provision is simultaneously recorded as a liability in the accounts of the lender and as an asset in the accounts of the borrowers. This is a deviation from business accounting where provisions are recorded as liabilities but not as assets.

9. The primary focus of this GN is on the SNA. However, the above-referred to GNs on retained earnings, unlisted equity and valuation of loans show that information on provisions can equally be critical for the balance of payments, government accounts and financial accounts.

ENTITY ACCOUNTING STANDARDS

10. Both the International Financial Reporting Standards/International Accounting Standards (IFRS/IAS) and the International Public Sector Accounting Standards (IPSAS) recognize provisions in the entities' financial statements.

11. IAS 37/IPSAS 19 Provisions, Contingent Liabilities and Contingent Assets outlines the accounting for provisions (liabilities of uncertain timing or amount), together with contingent assets (possible assets) and contingent liabilities (possible obligations and present obligations that are not probable or not reliably measurable). Provisions are measured at the best estimate (including risks and uncertainties) of the expenditure required to settle the present obligation and reflects the present value of expenditures required to settle the obligation where the time value of money is material. The Standards aim to ensure that only genuine obligations are dealt with in the financial statements – planned future expenditure, even when authorised by the board of directors or equivalent governing body, is excluded from recognition.

12. It should be noted that IAS 37/IPSAS 19 do not apply to financial instruments (including guarantees) which are within the scope of IFRS 9/IPSAS 41, 'Financial Instruments'. According to these standards, expected credit losses are to be recorded as impairments.

13. IAS 37/IPSAS 19 explain that the amount recognised as a provision should be the best estimate of the expenditure required to settle the present obligation at the balance sheet date, that is, the amount that an entity would rationally pay to settle the obligation at the balance sheet date or to transfer it to a third party [IAS 37.36]. This means provisions for one-off events (restructuring, environmental clean-up, settlement of a lawsuit) are measured at the most likely amount [IAS 37.40].

14. Provisions for large populations of revolving events (warranties, customer refunds) are measured at a probability-weighted expected value [IAS 37.39]. Both measurements are at discounted present value using a pre-tax discount rate that reflects the current market assessments of the time value of money and the risks specific to the liability [IAS 37.45 and 37.47]. In reaching its best estimate, the entity should consider the risks and uncertainties surrounding the underlying events [IAS 37.42].

Table 1
A few circumstances for which IAS recommends, or does not recommend, the recording of a provision

Circumstance	Recognise a provision?
Restructuring by sale of an operation	Only when the entity is committed to a sale, i.e. there is a binding sale agreement [IAS 37.78]
Restructuring by closure or reorganisation	Only when a detailed form plan is in place and the entity has started to implement the plan, or announced its main features to those affected. A Board decision is insufficient [IAS 37.72, Appendix C, Examples 5A & 5B

Warranty	When an obligating event occurs (sale of product with a warranty and probable warranty claims will be made) [Appendix C, Example 1]
Land contamination	A provision is recognised as contamination occurs for any legal obligations of clean up, or for constructive obligations if the company's published policy is to clean up even if there is no legal requirement to do so (past event is the contamination and public expectation created by the company's policy) [Appendix C, Examples 2B]
Customer refunds	Recognise a provision if the entity's established policy is to give refunds (past event is the sale of the product together with the customer's expectation, at time of purchase, that a refund would be available) [Appendix C, Example 4]
Offshore oil rig must be removed and sea bed restored	Recognise a provision for removal costs arising from the construction of the oil rig as it is constructed, and add to the cost of the asset. Obligations arising from the production of oil are recognised as the production occurs [Appendix C, Example 3]
Abandoned leasehold, four years to run, no re-letting possible	A provision is recognised for the unavoidable lease payments [Appendix C, Example 8]
CPA firm must staff training for recent changes in tax law	No provision is recognised (there is no obligation to provide the training, recognise a liability if and when the retraining occurs) [Appendix C, Example 7]
Major overhaul or repairs	No provision is recognised (no obligation) [Appendix C, Example 11]
Onerous (loss-making) contract	Recognise a provision [IAS 37.66]
Future operating losses	No provision is recognised (no liability) [IAS 37.63]

Source: https://www.iasplus.com/en/standards/ias/ias37

15. This list is indicative. A priori, there is no reason why the scope of provisions in the SNA should divert from how provisions are defined in IAS and IPSAS. For example, IPSAS 19, paragraph 1, deliberately excludes certain classes of provisions such as “provisions (…) arising from social benefits within the scope of IPSAS 42” and “provisions (…) arising from employee benefits”, in line with how the SNA looks upon this issue. A commitment of a particular government entity does not necessarily represent a provision.

16. When a provision (liability) is recognised, the debit entry for a provision is often an expense but not necessarily. Sometimes the provision may form part of the cost of the asset such as the cost of inventories or an obligation for environmental clean-up when a new mine is opened, or an offshore oil rig is installed [IAS 37.8]. The International Public Sector Accounting Standards (IPSAS 19) defines provisions in a similar way.

17. While IAS 37 explains provisions in terms of a liability, there is no guidance on the acceptance of a provision as a financial asset. Under IFRS/IPSAS the criteria to recognize provisions as liabilities is different from the criteria to recognize assets. In contrast, the common practice in the SNA to simultaneously identify financial asset and liability pairs is in the case of provisions not substantiated by the entity accounting standards.

18. Contrary to IAS 37/IPSAS 19, the Monetary and Financial Statistics Manual and Compilation Guide (MFSMCG) 2016 (IMF, 2017) recommends the recording of loan loss provisions as a liability. New provisions or changes in provisions are recorded as 'other changes in the volume of assets and liabilities', which will reduce equity. It should be noted that in the MFSMCG, equity is valued at book value and not at market value, as in the 2008 SNA. The recording of an 'other change in volume' is understandable when conceiving a provision as the precursor for loan write-offs. After all, the latter will equally be recorded as an 'other change in the volume of assets'.

19. The MFSMCG recording indicates that the recording of provisions for nonperforming loans is common practice in business accounting and that loan provisions and impairments may correspond to the same thing.

20. To summarize, the following categorization of provisions can be made:

a) Provisions related to *non-financial assets* (including the terminal costs as defined in the 2008 SNA)

b) Provisions related to *financial assets* (by IFRS and IPSAS addressed as impairments)

c) Provisions *unrelated to asset ownership* (warranty, customer refunds)

DIFFERENCES BETWEEN SNA AND ENTITY ACCOUNTING STANDARDS

21. As the GNs on retained earnings and unlisted shares illustrate, differences in accounting standards and accounting practices may complicate the translation of business accounting-based data to macroeconomic statistics.[2]

22. The differences between the SNA and the entity accounting standards manifest themselves in several ways. The different treatment of provisions is one reason why net worth as reported by businesses or government entities may not correspond to net worth as defined in the 2008 SNA. Similarly, the reported profits by businesses may not correspond to primary income as defined in the 2008 SNA. Even though provisions are not acknowledged as an SNA concept, for the purpose of national accounting, an obvious practical recommendation would be for compilers to keep track of provisions in the businesses' profit and loss accounts and balance sheet source data.

23. There is a strong relationship between terminal costs (as recognized in SNA) and provisions (as recognized in business accounting). The list of circumstances above indicates that provisions are also recorded when mining corporations have a future obligation to remove offshore oilrigs and to restore sea beds. In the 2008 SNA, such obligations are classified as terminal costs. The 2008 SNA explains terminal costs in a similar way as asset acquisition costs. Like acquisition costs, they are the inherent costs of gross fixed capital formation and

[2] In addition to the impact of provisions on income in the DITT's GN D.16, GN D.2 *Valuation of unlisted equity* discusses the impact various types of provisions may have on the valuation of unlisted equity when using methods that rely on company accounting records, such as Own Funds at Book Value.

should ideally be reflected in consumption of fixed capital. The 2008 SNA explains (paragraph 10.161) that consumption of fixed capital should cover anticipated terminal costs. This SNA recording has a few disadvantages.

24. Firstly, when moving to the end of the natural resource's service life, at some point in time the value of the oilrig may become negative (see Table 3a). This is not easily explained from an economic viewpoint.

25. Secondly, terminal costs may be untied to any preceding gross fixed capital formation. Examples are cleaning up costs and restoration of land or sea beds. One may classify such capital expenditure under land improvement. When such obligations are (broadly) known at the start of a mining operation, the corresponding land improvement asset will be negative during its entire service life and zero at the end of its service life. Again, this is a somewhat peculiar reflection of asset ownership.

26. Even though negatively priced fixed assets are a hard to grasp concept, they are meant to represent future costs. One may argue that fair accounting requires that preceding accounting periods must anticipate these future costs. When these costs are (at large) known in advance, they should be accounted for when assessing the mining operation's full value. More specifically, the expected financial obligations of mining companies may have a downward effect on the value of a natural resource asset. Without the availability of observed market transactions, the asset must be valued as the sum of current and future resource rents. These resource rents should be corrected for anticipated terminal costs. No one would be willing to purchase a natural resource at a price which ignores these future financial obligations. Therefore, in the context of natural resource accounting, information on provisions in the balance sheets of mining companies should not be ignored either.

27. Finally, on conceptual grounds, IAS and IPSAS do not seem to make a distinction between terminal costs and the legal obligations of companies or governments to compensate *third parties* for damages which are the undesired side effects of their operations. Of course, under the condition that there is a present obligation, there is a probable outflow of resources and a reliable estimate can be made for compensation of damages. In both cases a provision may be recorded. One difference is that terminal costs may be added to the investment value under the condition that the obligation of decommissioning is known when the investment decision was made. Yet, compensation obligations often emerge at a later stage when the mining operations have started which would in the IAS context imply the provision is instantly expensed.

28. The 2008 SNA makes the attempt to record terminal costs but ignores the future obligations to third parties. The two examples below indicate that, particularly for mining operators, these obligations to third parties can become significant.

The Kiruna case

The Kiruna mine is one of the largest and most modern underground iron ore mines in the world. The mine, located in Kiruna in the north of Sweden, is owned by Luossavaara-Kiirunavaara AB (LKAB), a Swedish state-owned mining company. In 2004, it was decided the present centre of the city of Kiruna would need to be relocated to accommodate mining-related subsidence. The relocation would be made gradually over decades. According to the Swedish Minerals Act, LKAB has the obligation to pay for the effects and costs that arise when the company's mining activities lead to urban transformations. To date LKAB has paid out about 11,3 billion Swedish crowns for the transformations since year 2006. At the end

of December 2020 LKAB reported in their balance sheet an amount of provisions of 3,2 billion crowns (≈ 340 million US dollars).

The Groningen case

Not very long ago the gas reserves in the Dutch province of Groningen were considered a blessing, even though in the sixties and seventies it became apparent that natural resource wealth does not necessarily result in economic prosperity, a phenomenon later explained by Neary & Gorden (1982) as the Dutch disease. Nowadays the Groningen situation is by some referred to as a disaster because of the social disruption caused by mining induced earthquakes. Inhabitants suffer from fear, are uncertain about damage compensations and are facing long delays in compensation payments.

Gas extraction in the province of Groningen has been taking place since the early sixties of the previous century. In the early nineties, Groningen experienced the first earthquakes. In subsequent years these earthquakes increased in frequency and magnitude, leading to cracks in walls of many dwellings and other buildings in the Groningen area. A full assessment of the (expected) damages and required compensation payments is still difficult to make. A letter from the Minister of Economic Affairs and Climate Policy to the Dutch Parliament (16 January 2018) mentions the total damage (e.g. reconstruction of dwellings and other buildings, value losses of real estate, psychological damage) could be as much as 10 billion euros. Although at first sight this seems a considerable sum of money, as a percentage of accumulated resource rents, the expected compensation costs are quite low (≈ 0.5%). The point is of course that the State and the mining corporations have, until recently, not been accumulating parts of their gas revenues for the sake of future compensation payments. If they had done so, the costs could have been covered without blinking an eye.

The Dutch State, by way of Energie Beheer Nederland (EBN, Energy Management Netherlands), and the private sector, by way of the Nederlandse Aardolie Maatschappij (NAM, Dutch Oil Company), have been partners in the operation of the Groningen gas field. Both parties have legal obligations to compensate for the incurred damages. The financial statements of both entities (EBN and NAM) show provisions for the expected compensation costs. The government arranged a special committee (https://schadedoormijnbouw.nl) for the administrative processing of damage claims. By 1 June 2021, 83.276 claims were filed, leading so far to agreed compensation payments amounting to 1 billion euros.

A REVIEW OF POSSIBLE SNA CHANGES

29. This section explores a few directions in which the next version of the SNA could be improved with statistical information on provisions. The purpose of this section is to guide the discussion on what level of prominence the next SNA should give to provisions.

ADDING MEMORANDUM ITEMS OR SUPPLEMENTARY ACCOUNTS

30. The *2008 SNA* (11.23) indicates that:

"…where contingent positions are important for policy and analysis, it is recommended that supplementary information be collected and presented as supplementary data."

31. It is not entirely clear why the 2008 SNA suggests the option of supplementary data for contingent positions and not for provisions. The 2008 SNA (11.130) also indicates it is useful to identify transactions relating to nonperforming loans. Provisions are perhaps not a transaction, but the information on nonperforming loans could in the SNA either be replaced or supplemented by information on provisions as memorandum items. This information indicates the actual expected losses from nonperforming loans which may give the national accounts users a better understanding of the creditor's income and net worth.

32. The DITT guidance note (D.2, Issue 3) on the valuation of unlisted equity emphasizes the following:

"The relevance of loan loss provisions, which has increased in the wake of the 2008 financial crisis, and the proliferation of non-performing loans, could have a significant impact on the valuation of unlisted companies. The general treatment of loan loss provisions, as well as the two related items—asset impairment and provisions for future payments uncertain in timing or amount—is clear and consistent between the BPM6 and 2008 SNA; both indicate that these provisions as such are not recorded in statistical accounts." Understanding the impact of this treatment on the valuation (net worth) of unlisted corporations in DI requires a careful reading of BPM6. 2008 SNA states that these amounts remain in the net worth."

The DITT guidance note (D.16) on the treatment of retained earnings raises similar concerns:

"... profits are limited by loan provisions that they have to separate by law. As a result, profits announced by the financial corporations may depart largely from the statistical recording (..) Again, this shows that information on provisions is a crucial factor when translating balance sheet data from companies to balance of payments and national accounts."

To obtain SNA based estimates for income and net worth, both guidance notes illustrate that provisions should be removed from balance sheet and net changes in provisions from profit-loss data as obtained from businesses, financial institutions and public entities. It should be noted that these net changes in provisions can either be positive or negative.

33. Like the SNA, in the MFSMCG, loans are to be recorded as the amounts of principal outstanding. In business accounting loan values may be adjusted directly for immediate or expected write-offs. The separate recording of on the one hand loans at nominal value and on the other provisions addressing foreseen write-offs could be followed quite similarly in the SNA as well. In other words, the SNA guidance on nonperforming loans and contingent positions could be modified to follow the guidance presently found in the MFSMCG, again, for two reasons:

(a) providing more detailed information on the "net worth" of institutional sectors to national accounts users. Without exposing provisions, the SNA runs the risk of overvaluing financial assets such as loans.

(b) supporting compilers to overcome the measurement issues addressed in guidance notes D.2 and D.16.

34. The guidance on supplementary tables for contingent positions can also be found in the 1993 SNA (11.26). During the previous SNA update, Lequiller (2004) advocated for similar reasons a more prominent representation of provisions in the SNA. In a footnote (11) he argues that:

"0 country, to my knowledge, publish supplementary tables on provisions and contingent liabilities in the framework of the national accounts."

35. Lequiller proposes to incorporate provisions in the SNA by way of creating a table on changes in provisions which would come as an additional table, just after the 'other changes in volume' account and just before the balance sheet. In addition, the balance sheet would include the traditional value of assets and liabilities under the current SNA valuation rules plus the stock of provisions. He also suggests recording impairments of assets (nonperforming loans) in these accounts.

Table 2
2008 SNA Table 13.1 with supplementary entries for provisions indicated in blue*

	Non-financial corporations	Financial corporations	General government	Households	NPISH	Total economy
Opening Balance sheet						
Net worth *non-financial assets + financial assets − liabilities*	-88	-30	498	4500	210	5090
of which:						
Terminal and compensation costs	-300					
Standardised guarantees			-100			
Provisions as supplementary entries (-)	-400	-120	-15			
Financial assets related		-120	-10			
Non-financial assets related	-400					
Unrelated to asset ownership			-5			
Net worth *non-financial assets + financial assets − liabilities − provisions*	-488	-150	483	4500	210	
Changes in Net worth						
non-financial assets + financial assets − liabilities	236	4	-54	305	9	500
of which:						
Terminal and compensation costs	-23					
Standardised guarantees			12			
Provisions as supplementary entries (*net change*	-20	10	1			
Financial assets related		10	-2			
Non-financial assets related	-20					
Unrelated to asset ownership			1			
Changes in Net worth						
non-financial assets + financial assets − liabilities − provisions	216	14	-53	305	9	
Closing balance sheet						
Net worth *non-financial assets + financial assets − liabilities*	148	-26	444	4805	219	5590
of which:						
Terminal and compensation costs	-323		-88			
Standardised guarantees						
Provisions as supplementary entries (-)	-420	-110	-16			
Financial assets related		-110	-12			
Non-financial assets related	-420					
Unrelated to asset ownership			-4			
Net worth *non-financial assets + financial assets − liabilities − provisions*	-272	-136	428	4805	219	

* The recording of provisions as supplementary items exposed in blue in this table should only address the foreseen losses in those financial assets, particularly loans, which are recorded in nominal terms and not for other instruments such as debt securities for which foreseen future losses are already reflected by their market prices. Furthermore, it should exclude terminal and compensation costs and standardised guarantees as these are already included as standard components in the sequence of accounts.

36. Lequiller's proposal of a 'provisions account' could give more prominence to provisions in the SNA as significant statistical information that should not be ignored. His proposal did not materialize in the 2008 SNA update. Perhaps it is time to reconsider his proposal and Table 2 in this guidance note is an attempt to do so. In this table it is suggested to present financial assets related provisions, for example those on nonperforming loans, as a separate item. One main objective of the proposed table would be to report data series on the net worth adjusted for provisions. The recording of such data series could be recommended when provisions substantially contribute to the (changes in) net worth of institutional sectors.

37. Table 2 shows how a supplementary table on provisions may extend the existent 2008 SNA framework. The 2008 SNA Table 13.1 – which explains the relationship between the opening and closing balance sheets and changes in assets and liabilities - is used as a starting point. The entries in black originate from this table, including 'terminal and compensation costs' and 'standardised guarantees' as standard components in the main sequence of accounts. The purpose of Table 2 is to add supplementary stock and flow data for provisions which are highlighted in blue. The table could be understood as a supplementary table to the current 2008 SNA Table 13.1.

38. The opening balance sheet in Table 2 presents in addition to the non-financial assets and financial assets/liabilities the stocks on provisions. The imaginative figures on provisions suggest most provisions related to financial assets are found in the balance sheet of the financial corporations. Other types of provisions, non-financial assets related or those unrelated to assets, are shown in the balance sheets of the non-financial corporations and government sector.

39. In Table 2 the changes in net worth also include entries for provisions (again, indicated in blue). Compared to the presented entries, additional information could be provided, if available, on:

- newly emerging provisions (+),
- closing or settling of existing provisions (−) and,
- existing provision reappraisals (+/−).

40. The closing balance sheet's structure in Table 2 copies the opening balance sheet. In addition to the opening balance sheet, it includes all changes in provisions recorded in the observed accounting period, irrespective of how they came into being. This point will be picked up later in this guidance note.

41. In the case of provisions, it must be acknowledged that the national totals shown in Table 2 are probably less informative and should not be exposed (as indicated by the blue squares). At the national level, those provisions addressing a possible future claim vis-à-vis non-resident entities would be of particular interest, as those are the ones potentially affecting the nation's net worth.

42. In practice it may be difficult to assign provisions to resident/non-resident counterparts as the asset side of a provision is often not identifiable. After consultation with balance of payments experts, it was concluded not to recommend a table on provisions in BPM7. Provisions as external liabilities will not be collected in the BPM framework. Compilers could collect information on provisions only in rare circumstances (e.g., loan loss provisions to estimate fair values of loans when the compiler decides to release the information while the data are not directly available from lenders).

43. The table 2 presumes aggregates of provisions can be exposed meaningfully at the institutional sector level. However, provisions in the financial corporations' sector may partly address nonperforming loans provided to debtors within the same sector. Such internal positions may weaken the way in which provisions can help to create a fair image of a sector's net worth. Yet, a breakdown of the financial corporations' sectors as explained in the 2008 SNA (Chapter 4 – E) may certainly help to strengthen the picture of net worth on a subsector-by-subsector basis.

44. Perhaps it is unnecessary to underline that provisions are recorded in Table 2 only for the foreseen losses in those financial assets, particularly loans, which are recorded in nominal terms, the amounts of principal outstanding and not for debt securities for which foreseen future losses are already reflected by their market prices.

→ **As part of the upcoming SNA update, the adoption of a supplementary table for provisions should be reconsidered, following the proposal as exposed in Table 2.**

PROVISION AS AN ASSET-LIABILITY PAIR

45. Issue 9 of the research agenda on the *SNA* website introduces provisions as follows:[3]

"It seems that the main reason for which national accountants reject a systematic incorporation of provisions is the fact that provisions can appear, contrary to liabilities, in the balance sheet of one entity and not, at the same time, as a counterpart entry in the balance sheet of another entity. The quadruple entry rule is thus not verified (some say the symmetry of the tables is not ensured). This happens essentially because a provision is something that is recognised by the entity which makes the promise (for example a provision for dismantling costs) and, forcibly, not by a counterpart entity (which can even be not known at the time of the provision).

However, this argument of asymmetry is very weak when set against the need of users of the SNA to show the real situation of entities regarding their balance sheet and main balancing items. For example, today, the SNA overestimates the net worth of banks (by not taking into account impaired loans), and shows a biased measure of their profits, by not taking into account the change in their stock of impaired loans. This non-recognition of the principle of provisions will be even more difficult to sustain in the future as national accounts attempt to show accurate accounts for general government, when governments are more and more likely to record provisions themselves, as recommended by the International Public Sector Accounting Standards Board (IPSASB). When a major provision will be recorded by a government, with no corresponding record in the SNA version of the accounts, the inconsistency will become obvious."

46. In this context, the following observations are relevant. Firstly, as already mentioned the entity accounting standards preliminary recognize provisions as a liability but not as an asset. Any attempt in the SNA to do so would not be in correspondence with IFRS and IPSAS.

47. Secondly, the list of circumstances under which businesses are expected to record a provision, as shown in Table 1, contains several examples in which a counterpart entity cannot be readily identified. The Groningen case may be an example were the households in the mining area may be considered having a claim on the revenues of the mining company. A judicial confirmation of the claim may or may not coincide with the moment of recording of a provision in the balance sheet of the mining company. In the case of warranties or consumer

[3] https://unstats.un.org/unsd/nationalaccount/rissue.asp?rID=9

refunds, the situation may be comparable to the example of student loan guaranties, and thus under such circumstances the acceptance of a provision representing, in addition to a liability, an asset the books of households does not seem too farfetched.

48. To conclude, only under a very limited number of circumstances, it might be feasible to record provisions in terms of financial asset-liability pairs.

49. This leads to the question how to classify a provision in the next SNA. At least two options come to mind:

a. non-financial liability

b. financial liability

The notion of a provision as a non-financial liability is a totally new SNA concept but fits well with the idea that in many cases the liability side of the provision cannot be paired with an asset. On the other hand, it would be unfortunate to a priori rule out any existence of a provision asset. As such, it seems appropriate to conceive a provision as a special kind of liability for which the asset side often cannot be identified.

50. We also must consider how provisions would enter the accounts. Often provisions are made in response to events which are beyond control of the respective economic actor. In such cases, it seems appropriate to record newly emerging provisions as an 'other change in volume of assets'. However, in the next section, it is explained that accepting a provision can be a deliberately accepted liability for example when setting up a power plant or oilrig for which decommissioning is being required. In such cases, the recording of a provision as an 'other change in volume' seems inappropriate. The proposed accounting in such cases is exposed in Tables 3a and 3b which are in more detail explained below.

→ **The fact that in many cases a provision as a liability cannot be paired to an asset, should not prevent these provisions from being recorded in the next SNA, at the minimum in a supplementary table as presented above.**

PROVISIONS AND TERMINAL COSTS

51. The 2008 SNA provides guidance on how to record the terminal costs of mining operations. Terminal costs result from (legal) obligations to decommission for example oilrigs after termination of the mining operation. Ideally, terminal costs should be depreciated over the service life of the mining operation. Doing so, the ex-ante determined consumption of fixed capital (CFC) is rightly removed from the resource rent, i.e., the unit value of the natural resource prior to extraction times the physical amounts extracted. The estimation of resource rents, as recommended by the 2008 SNA (20.48) and the SEEA-CF (Table 5.5), explains that the gross operating surplus of a mining company minus the capital services (CFC plus the return to capital) of fixed assets should represent the mineral's resource rent.

52. In a next step, without the existence of a representative market price, the value of the natural resource asset will be estimated by the net present value of current and future projected resource rents. Subtracting anticipated terminal costs from the resource rent implies that the value of the natural resource will be lower than without the presence of terminal costs. When obliged to clean up after closing of the mine, mining companies are not willing to pay as much for a mining concession as without such obligations.

53. Due to uncertainties about timing and amounts, or due to lack of information, the recommended recording of CFC anticipating future terminal costs may not be widely practiced. It would be useful to investigate the accounting practices of the national statistical offices at present. The 'opt out' is to record a CFC to the full amount once the terminal costs materialize. In fact, this is the European System of Accounts (ESA 2010) recommended recording (3.139). From a natural resource accounting viewpoint, this recording is unfortunate as it may contribute to overstated natural resource values. Also, this recording contradicts IAS 37/IPSAS 19.

54. An undesirable peculiarity of the 2008 SNA recording of terminal costs is the possible emergence of negative fixed asset values. This phenomenon is shown in Table 3a. It exposes the example of an offshore mining operation for which decommissioning of the oilrig is being required. The 2008 SNA recording has two gross fixed capital formation (GFCF) moments, one at the start (purchase and instalment of the oilrig = 1000) and at the end of the mining operation (removal of the oilrig = 500).[4] For the sake of simplicity, we assume (1) linear depreciation, (2) no time preference of money and (3) perfect foresight. An annual CFC of 150 is needed to cover both investments. As a result, the asset value becomes negative in the second half of its service life, a phenomenon not easily explained to users.

55. The introduction of provisions in the next version of the SNA provides an opportunity to improve the accounting for terminal costs. If, at the start, the obligation of decommissioning is known and accepted, IAS 37/IPSAS 19 recommend including the expected terminal costs in the total investment value. This brings the recording of decommissioning costs at a par with the recording of instalment costs and ownership transfer costs, of course a significant difference being that for decommissioning costs only the expected amounts can be added to the upfront fixed asset value.

56. IAS 37/IPSAS 19 also provides the possibility to 'capitalize' clean-up costs of non-produced assets such as land. Such a recording would bring the foreseen clean-up costs on a par with land improvement.

57. Table 3a shows what an SNA recording could look like when following as close as possible IAS 37/IPSAS 19. Again, IAS 37/IPSAS 19 takes the position that in fact there is one single investment moment in which all (expected) capital related costs are captured upfront. As in the SNA the recording of GFCF must comply with the supply-use identity of products, the IAS recording cannot be one-to-one copied into a comprehensive GFCF estimate. Adding instantly a provision element to GFCF would leave us with a non-produced portion of GFCF which cannot be accounted for in the supply-use table.

58. Therefore, proposed SNA translation is to add a provision charge to the oil rig's value complementing the amount of GFCF. This elevated asset value serves two purposes:

a. A proper recording of CFC without moving towards negative fixed asset values.
b. A more precise recording of resource rents and subsequently natural resource asset values.

[4] In this way, all costs associated with the purchase of the oil rig are recorded as gross fixed capital formation, in line with para. 10.51 of the 2008 SNA.

59. In the proposed recording option, the provision comes in to being as an other change in the volume of assets which is perhaps unfortunate but seemingly unavoidable.

60. In year 10, the GFCF in terminal costs (500) is counterbalanced by a corresponding negative provision charge (-500) leading to a zero asset value of the oil rig and leading to a cancellation of the provision.

Table 3a
Recording of terminal costs – IAS versus SNA

Year	0	1	2	3	4	5	6	7	8	9	10
2008 SNA method											
1 GFCF	1000										500
2 Cash flow	-1000										-500
3 Oil Rig Asset Value	1000	850	700	550	400	250	100	-50	-200	-350	-500
4 CFC		150	150	150	150	150	150	150	150	150	150
IAS/IPSAS method											
1 Total investment	1500										
2 Cash flow	-1000										-500
3 Oil Rig Asset Value	1500	1350	1200	1050	900	750	600	450	300	150	0
4 CFC		150	150	150	150	150	150	150	150	150	150
5 Provision (= liability)	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	0
2025 SNA method (proposed)											
1 GFCF	1000										500
2 Cash flow	-1000										-500
3 Oil Rig Asset Value	1500	1350	1200	1050	900	750	600	450	300	150	0
3b Provision charge (= other change in volume)	500										-500
4 CFC		150	150	150	150	150	150	150	150	150	150
5 Provision (= liability)	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	0

Table 3b
Recording of terminal costs – the proposed 2025 SNA option

Year	0	10	10	10
Realized terminal costs		500	400	600
Oil Rig	1500	0	0	0
GFCF (*cumulated*)	1000	1500	1400	1600
Provision charge	500	0	100	0
CFC (*cumulated*)	0	-1500	-1500	-1600
Provision	-500	0	-100 ↓	0
Cancelled via other volume change			0	
Net worth	1000	0	0	0

61. It should be noted that the perpetual inventory method needs to take into account the foreseen terminal costs as added in the form of a provision charge to the oil rig asset value. In that way, this value is also properly taken into account in the calculation of the consumption of fixed capital. Its treatment will expectedly not differ much from other supplementary capital expenses such as ownership transfer costs of which the consumption of fixed capital, following 2008 SNA, are equally calculated in the perpetual inventory method.

62. The ex-ante determined terminal costs may, and probably will, differ from the realized costs. Such outcomes are exposed in table 3b. A surplus, which means expected terminal costs (500) exceed realized terminal costs (400), implicates that the provision charge recorded in year 10 will be -400 instead of the full amount (-500). The remaining provision (100) is cancelled, again, via an other change in volume. A shortfall, in our example 500 - 600, will be covered by a supplementary catch-up investment (500 + 100) in year 10 which is depreciated (-100) instantly.

63. To summarize, the IAS 37/IPSAS 19 recording would enable bringing all capital costs (instalment costs, terminal costs) into the production account of the mining company without the anomaly of negative asset values. In this way, the production account becomes more suitable for calculating resource rents, taking all elements of investment costs into account.

64. This leads to the following recommendation:

→ **The SNA guidance on terminal costs must be brought in line with IAS 37/IPSAS 19, i.e. including the expected terminal costs in the fixed asset value at the start of the mining operation.**

PROVISIONS AND COMPENSATION COSTS

65. IAS 37/IPSAS 19 recommend under comparable circumstances the recording of a provision for emerging future obligations to compensate for damages imposed on others. Regarding the debit side of its recording the situation will depend on a few conditions. When its requirement is known at the start of the mining operation, and a fair assessment of the timing and amount can be made, the recording will be similar as shown under terminal costs.

66. In the above presented examples (Kiruna, Groningen) the requirement of compensation became clear halfway the mining operations. In the Kiruna case, it was decided to scale up the mining site which required a village to be relocated. One could argue that in this case, a supplementary investment decision was taken of which the costs of reallocating the village were a part of the deal. This would mean that according to IAS 37/IPSAS 19 the same recording as shown under terminal costs could still apply.

67. In Groningen the extraction of gas started in the early sixties. In the nineties it became apparent that compensation of the neighbouring households would be required. However, the amounts and timing were, and still are, uncertain. This means IAS 37/IPSAS 19 would not accept a provision even though both the government (EBN) and the private extractors (NAM) have had corresponding provisions in their balance sheets. Halfway the nineties a decision could have been taken to stop gas extraction. Yet, it was deliberately decided to continue operations. This makes the Groningen and Kiruna cases rather similar in the sense that at a certain point in time a decision was taken to continue operations and thereby accepting liability and related costs. One may also argue that such a decision could only be made based on reasonable information on the future costs and benefits.

68. Another question is if in the case of future compensation costs the provision would manifest itself as an asset-liability pair. The existence of a claim by households on the mining company is probably debatable but anyhow Table 4a shows the implications of such position.

Table 4a
Provision in response to compensation obligations as an asset-liability pair

Mining companies

	t = 0		*t* = 10	
GFCF	1000			
Capital transfer	500			
Cash	-1000		-500	
Provision		500		-500
	500	500	-500	-500

Households

	t = 0		*t* = 10	
Capital transfer		500		
Cash			500	
Provision	500		-500	
	500	500	0	0

Table 4b
Provision in response to compensation obligations as a single-entry liability

Mining companies

	t = 0		*t* = 10	
GFCF	1000			
Provision charge	500			
Cash	-1000		-500	
Provision		500		
Capital transfer			500	
	500	500	0	0

Households

	t = 0			
Capital transfer				500
Cash			500	
	0	0	500	500

69. This recording brings accrual accounting to a next level as it will require the capital transfer from the mining company to the households to be recorded at the start of the investment decision. In our example, the compensation in terms of cash will take place ten years later. Unless there is a fair amount of certainty about the settlement's timing and amounts the recording in Table 4a is probably infeasible in practical terms or may otherwise be conceived as imprudent.

70. Since a provision asset-liability pair implies that the future compensation obligations are settled right at the start, there will be no need to add a provision charge to investment costs. This necessity returns as soon as the provision is recorded as a single-entry liability. This is shown in Table 4b. In this case the provision charge anticipates the future settlement of the compensation obligations towards households in a similar way as provisions anticipate future terminal costs as shown in Tables 3a and 3b.

71. This leads to the following recommendations:

→ **The SNA recording of compensation costs should be brought in line with IAS 37/IPSAS 19 i.e., to record a provision for emerging future obligations to compensate for damages imposed on others, when an acceptable assessment can be made on timing and amounts.**

→ **The recording of compensation costs as a provision liability-asset pair should not be recommended in the next version of the SNA.**

STRANDED ASSETS

72. Mitigation objectives as laid down in the Paris agreement should in the coming years result in strong worldwide reductions in fossil fuel consumption. Particularly, a rapid phasing out of coal consumption is foreseen. These objectives are expectedly causing losses in the values of corresponding energy resources as soon as the prices of these fossil energy carriers will start to fall. In addition, downwardly bended extraction path projections may additionally give rise to declining energy resource asset values. This phenomenon is also known as 'stranded assets'.

73. As indicated in the list of circumstances in Table 1 above, in business accounting, future operating losses are not allowed to be recorded as provisions. Paragraph 5.192 of the SEEA-CF, explaining the revaluation entry in the monetary asset account for mineral and energy resources (Table 5.9), is equally clear in its recommendation:

"The additional entry in the monetary asset account relates to the recording of revaluations which occur due either to changes in resource prices over the accounting period or to changes to assumptions underlying the NPV approaches that are typically used to value mineral and energy resources."

74. In other words, adjusted extraction paths due to changing energy market prices must be recorded as a revaluation and not as an advanced writing off (depletion) of the natural resource.

→ **Given that soon, the stranding of assets may significantly contribute to the net worth of particularly fossil energy resource dependent economies, the next SNA and the SEEA-CF should explicitly address the recommended recording convention to record adjusted extraction paths due to changing energy markets as revaluations.**

CONCLUSIONS AND POSSIBLE WAYS FORWARD

75. This GN is an attempt to bring the recording of provisions within scope of the SNA. For the three categories of provisions, (1) financial assets related, (2) non-financial assets related and (3) provisions unrelated to assets, the proposal is to present information in a supplementary table. The purpose of this table is twofold:

- taking provisions explicitly into consideration when translating the source data to the national accounts.
- providing a better picture of the net worth of sectors which have substantial amounts of provisions on their balance sheets.

76. Other GNs (on unlisted equity, valuation of loans, retained earnings) show that introducing the recording of financial assets related provisions (on nonperforming loans) in the SNA may have far-reaching consequences on output (FISIM) and income. Therefore, no conceptual changes are being recommended for this category of provisions.

77. For terminal costs (non-financial assets related provisions), the proposal is to adopt the recommendation from IAS 37/IPSAS 19 on recording of provisions in the next version of the SNA, i.e., including the expected terminal costs in the value of fixed assets.

78. For compensation costs (non-financial assets related provisions) the IAS 37/IPSAS 19 recording is recommended only to recognize these costs if the corresponding conditions of a fair assessment of timing and amounts apply, and the liability is deliberately accepted as part of an investment decision. In that case, the recommendation is to also include these values in the main sequence of accounts.

79. It is recommended to classify provisions as a special kind of liability for which the asset side is not identified.

80. Finally, it is recommended to provide explicit guidance on the phenomenon of stranded assets in the next SNA and the SEEA-CF, i.e. to record adjusted extraction paths due to changing energy markets as revisions, even though it is perfectly clear such evens cannot be subject to a provision.

REFERENCES

Corden W.M. & J.P. Neary (1982), "Booming Sector and De-Industrialisation in a Small Open Economy", The Economic Journal, 92: 825-848.

European system of accounts 2010 https://ec.europa.eu/eurostat/documents/3859598/5925693/KS-02-13-269-EN.PDF.pdf

IMF (2017) Monetary and Financial Statistics Manual and Compilation Guide 2016 https://www.imf.org/external/pubs/ft/bop/2021/pdf/37/21-05.pdf

Lequiller F. (2004) the treatment of provisions in the national accounts: elements for the review of the SNA, paper presented at the OECD National Accounts Working Party Microsoft Word - NAES 7 - Lequiller.doc (oecd.org)

System of Environmental-Economic Accounting 2012 Central Framework, https://unstats.un.org/unsd/envaccounting/seeaRev/SEEA_CF_Final_en.pdf.

System of National Accounts 1993, https://unstats.un.org/unsd/nationalaccount/docs/1993sna.pdf

System of National Accounts 2008, https://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf

Regarding the Kiruna Mine case, the following information was consulted:

https://samhallsomvandling.lkab.com/en/urban-transformation/a-positive-force-in-the-community/lkab-pays/

https://www.mining-technology.com/features/moving-a-town-to-save-a-mine-the-story-of-kiruna/

https://www.lkab.com/en/SysSiteAssets/documents/finansiell-information/en/annual-reports/lkab_2020_annual_and_sustainability_report.pdf

Regarding the Groningen Mine case, the following information was consulted:

https://schadedoormijnbouw.nl

EBN: Energie Beheer Nederland - Energising the transition

Nederlandse Aardolie Maatschappij | NAM

Annex I – excerpts from accounting standards dealing with provisions

Standard	Par('s)	Brief explanation of the recording
2008 SNA	A4.41 – A4.43	In the SNA, liabilities and provisions relating to financial instruments are generally recognized in the main accounts only if there is a corresponding financial asset of equal value held by a counterparty. However, it is recommended that certain provisions that do not satisfy this criterion, such as those for non-performing loans, should be recorded as memorandum items. Contingent liabilities are not recognized at all in the core accounts, except in the case of standardized guarantees.
IAS 37		A provision should be recognised only when there is a liability i.e., a present obligation resulting from past events. The Standard thus aims to ensure that only genuine obligations are dealt with in the financial statements.
	37.2	This Standard does not apply to financial instruments (including guarantees) that are within the scope of IFRS 9 Financial Instruments.
	37.6 (deleted)	When a provision (liability) is recognised, the debit entry for a provision is not always an expense. Sometimes the provision may form part of the cost of the asset. Examples: included in the cost of inventories, or an obligation for environmental clean-up when a new mine is opened or an offshore oil rig is installed.
	37.8	Other Standards specify whether expenditures are treated as assets or as expenses. These issues are not addressed in this Standard. Accordingly, this Standard neither prohibits nor requires capitalisation of the costs recognised when a provision is made.
IPSAS 19	4	This standard does not apply to financial instruments.
	22	A provision shall be recognized when: (a) an entity has a present obligation as a result of a past event. (b) It is probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation (c) a reliable estimate can be made of the amount of the obligation.
	27	Examples of such obligations are penalties or clean-up costs for unlawful environmental damage impost by legislation on a public sector entity. A public sector entity would recognize a provision for the decommissioning costs of a defense installation or a government-owned nuclear power station.

	17.30c	The cost of a plant and equipment comprises (..) the initial estimate of the costs of dismantling and (..) restoring.., the cost model (17.43) explains assets should be valued less any accumulated depreciation.
Monetary and Financial Statistics manual and Compilation Guide 2016	2.32	In monetary statistics, provisions for losses on assets, which are internal to the reporting institutional unit, are treated as if these are liabilities and are classified under Other accounts payable. In this regard, the underlying assets are recorded gross of such provisions. There is a reduction in Equity liability whenever provisions are made, because these provisions are charged to losses. Provisions are a precursor of a possible loan (or other financial asset) write-off and, similar to loan write-offs, are recorded as OCVA