Delineation of General Government Sector – The Issue of Extra Budgetary Units

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1 This Paper expresses the author’s own opinions and not necessarily that of the Federal Statistical Office of Germany.
Abstract

The exhaustive coverage of general government units is a complex but important issue in National Accounts and Government Finance Statistics as has been underlined by the G20 Data Gaps Initiative conducted of the IMF. The size of general government sector and the amount of units covered depend on a number of determinants. Which goods and services does the government offer to its citizens? Are they produced by the government itself or purchased at the market? Is the general government sector centrally or decentrally organised? Have traditional government activities been outsourced into extra-budgetary units or even privatised? The latter question is crucial as in the last two decades in many countries more and more extra budgetary units were created because several activities, like higher education institutions, have been gradually outsourced.

As the implementation of SNA 2008 and ESA 2010, respectively, provides amended rules for the general government sector, this opportunity is taken by german statisticians to check systematically all units of the public sector and to classify them into the corresponding sector. However, before determining the general government sector in its entirety a new tool had to be designed: the so-called BKM register containing all government controlled units. The first part of this paper deals with its presentation.

The second question addressed in this paper is how to proceed when compiling general government accounts combining data from several different statistics. The main issues here are data reconciliation and to avoid double counting. The solution was to create a new tool: the reintegration which enables the harmonisation of budget with extra budgetary units within the framework of national accounts. Its main steps are presented in the second part of this paper. A first assessment whether these two tools are sufficient regarding the delineation of the general government sector is given in an outlook.

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2 BKM is the abbreviation for Berichtskreismanagement.
Introduction:

The financial turmoil of the last years brought to everyone’s evidence how vital it is to have sound indicators of public finance statistics as the solvability of a country depends on the government's ability to borrow money from investors to finance its expenses and eventually its political objectives. Therefore, a precise delineation of the general government sector is essential as it is the base to determine the deficit ratio (net borrowing/net lending in % of GDP) and the debt ratio (in % of GDP) of general government which in the European Union are key indicators to monitor the compliance to the Stability and Growth Pact (Maastricht Treaty).

Aside primary units (i.e. core entities) like ministries or branches of the social security which are the backbone of the different general government subsectors there are many extra budgetary units; some of those being spun-off from primary units. These units are more or less separate legal identities, and have in general a substantial autonomy of decision.

The implementation of new standards in National Accounts (implementation of the SNA 2008 or of ESA 2010 for countries of the European Union) has been an opportunity for German statisticians to check systematically all units potentially belonging to the general government sector and to classify them into one of the corresponding institutional sectors: general government, non-financial or financial corporations, non-profit institutions serving households. In particular, the challenge has been to get a complete coverage of all extra budgetary units belonging to the general government sector in order to succeed with its exhaustive delineation. To do so the following issues had to be solved:

1. What are the relevant National Account criteria an extra budgetary unit has to comply with to be classified within the general government sector and which data are required to perform the tests?
2. How to identify extra budgetary units in practice?
3. How can the relevant information of extra budgetary units be adequately stored?
4. How to reconcile budget data from extra budgetary units and core entities?

The size of general government and the number of units covered depends on several determinants as shown in chapter 1. Chapter 2 presents the criteria of ESA 2010\(^1\) a unit has to satisfy to be part of the general government sector. Chapter 3 explains how in practice extra

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\(^1\) The structure of ESA 2010 is consistent with the worldwide guidelines on national accounting set out in the System of National Accounts of the United Nations 2008 (SNA 2008), apart from certain differences in presentation and the higher degree of precision of some of the ESA 2010 concepts which are used for specific purposes of the European Union. For the sake of convenience, this paper focusses only on the European System of Accounts (ESA 2010), that will enter into force from September 2014, as ESA 2010 is legally binding for Germany as a Member State of the European Union. Indeed, the authors have been dealing with its implementation during the major revision of National Accounts in 2014.
budgetary units are identified and stored in a register of public units (BKM). As budgetary information of extra budgetary units is in general contained in several different statistics, the main issues are data reconciliation and to avoid double counting. The re-integration, a tool introduced to ensure the budget data harmonisation of primary with extra budgetary units, is presented in chapter 4. The outlook evaluates the usefulness of the BKM and re-integration.

1- Determinants of the size of general government:

The size of general government sector and the number of units covered depend on several determinants. First of all, more generic parameter like demographic, geographical or administrative aspects can be key determinants:

- territorial surface of the country,
- ageing of its population,
- share of population in age of being enrolled at school,
- growth or decline of the population,
- density of the population,
- degree of urbanisation (do many people live scattered in the countryside or do people predominantly live in large cities)
- territorial reform with the result to merge many former small neighbouring local entities to form fewer, but new larger local bodies

Moreover, the answers to the following four questions that are being discussed now with concrete examples, lead to a number of facts that are interconnected and may impact considerably on the number of extra budgetary units existing in a country. These questions are:

1. Which goods and services does the government offer to its citizens?
2. Are they produced by the government itself or purchased at the market?
3. Is the general government sector centrally or decentrally organised?
4. Have traditional government activities been already outsourced into extra budgetary units or even been privatised?

*The german register of public units is called Berichtskreismanagement (BKM).*
1.1- Which goods and services does the government offer to its citizens?

The size of general government can vary considerably across countries and over time. It depends for instance a lot on the preferences of its citizens as regards public goods and services and to some extent also on the political tradition of a country. Obviously a welfare state offering a large range of public services free of charge to its citizens like free education, health care and many other social protection services is likely to have a bigger general government sector than a slim state which only offers a limited range of core governmental services like guaranteeing property rights or internal and external security. Therefore, the size of general government may at least have an indirect impact on the number of extra budgetary units, depending of course also on additional aspects such as administrative arrangements that will be discussed in forthcoming questions.

1.2- Are they produced by the government itself or purchased at the market?

This point deals with the question how government organises the provision of goods and services. Indeed, the size of general government can in particular be determined on the one hand by the bundle of goods and services government offers to its citizens and on the other hand by who is producing it: the government itself or other market or non-market producers outside of the public sector. Do private households get health products and services from health industry at market prices, without any support from government (like in the form of subsidies) or do they receive them (nearly) free of charge under the control of the government?

Aside the point, whether citizens of a country prefer a welfare state or not, it depends also on the traditions of a country: is the civil society very active? Are there a number of non-governmental organisations receiving sufficient donations to provide non-market services such as education and culture instead of the government? Do entities from the non-profit sector distribute meals or health care free of charge? Is the community at local level organised in such a way that many activities (library run by volunteers, voluntary fire brigade, etc.) that could also be carried out by general government are provided instead or at least largely supported by non-governmental organisations?

1.3- Is the general government sector centrally or decentrally organised?

Matters like whether a country has a more federal than central tradition may result in a less central administrative infrastructure for a federally structured country as would be expected for a country whose government is centrally organised. Indeed, many countries relying on a central administrative structure renounce for instance on a regional subsector for the general government sector. Conversely, a federal state with a strong emphasis on independent regions may have more units at regional level. Depending on the degree of autonomy each region enjoys
in certain activities (which could for instance be health, education, culture) the number of extra budgetary units could increase as every region will then have the option to delegate some of its duties to own bodies.

Suppose a comparison between two regions organising their schools as extra budgetary units. In the first region, for instance, policy makers could decide that a school body at the secondary level of education could exist for any kind of educational program offered in that region, because the population density of this rural region is low and distances to run from and to schools for pupils are generally quite long. In the second region school bodies could more generally exist for each level of education only, because that region is very densely populated as it corresponds to a big city. In the first example an own type of school exists for any kind of educational program at secondary level of education, in the second case, all school programs belonging to the secondary level of education would be grouped together. When comparing the number of extra budgetary units in both regions just mentioned the former example obviously lead to much more extra budgetary units than the latter case.

1.4- Have traditional government activities been already outsourced into extra budgetary units or even privatised?

Finally, the tendency to progressively deregulate certain branches of the economy and to privatise formerly public enterprises (like was the case for electricity, post, telecommunication, airlines etc.) or to opt for public private partnerships can downsize the number of units belonging to the general government sector. Besides, one could even think of outsourcing activities that were former genuine activities of general government like internal or external security (instead of a regular army, private firms with mercenaries are being contracted for some operations).

Budget constraints and subsequent cuts may result in certain cases to closing public entities like hospitals in particular when they are accumulating losses. The ageing of the population and the ongoing demographic change may decrease the demand for schools and therefore lead to a reduction of the number of educational entities. In other cases, tight budget constraints and the wish of a more effective public service may lead to a spin-off of public units which get more managerial and financial autonomy with the objective to be more efficient and cost-effective.

All the points that have just been mentioned can have an impact on the size of the general government sector and therefore, depending of course also on institutional arrangements, on the number of extra budgetary units.
2- How to delineate general government in conformity with National Accounts standards (according to ESA 2010)?

What are the relevant National Account criteria a unit has to satisfy to be classified inside of the general government sector? Which data are required to perform the tests? In fact, this chapter explains from a theoretical point of view what has been done during the general revision in 2014 as far as sector classification is concerned.

2.1- Sector of general government (S.13)

According to paragraph 2.111 of ESA 2010 “the general government sector (S.13) consists of institutional units which are non-market producers whose output is intended for individual and collective consumption, and are financed by compulsory payments made by units belonging to other sectors, and institutional units principally engaged in the redistribution of national income and wealth”.

The general government sector is divided into four subsectors:

- Central government (S.1311)
- Regional government (S.1312)
- Local government (S.1313)
- Social security funds (S.1314)

2.2- Primary and extra budgetary units

First of all, two main types of entities that potentially belong to general government can be distinguished according to ESA: primary and extra budgetary units.

- A primary unit is described in paragraph 20.08 of the ESA 2010: “as a core entity, notably inside the central government that exercises national executive, legislative and judiciary powers. Its revenues and expenditures are directly regulated and controlled by a Ministry of Finance, or its equivalent, by means of a general government budget approved by the legislature. Despite its size and diversity, this entity is usually a single institutional unit. Ministerial departments, agencies, boards, commissions, judicial authorities, and legislative bodies are part of this core central government unit. The separate ministries within it are not recognized as separate institutional units as they do not have the authority to own assets, incur liabilities, or engage in transactions in their own right”. These primary units exist at the central (Federal State), regional (Länder) and local levels of government (i.e. municipalities) as well as the different branches of social security.
• Extra budgetary units are defined in paragraph 20.10 of the ESA 2010 as being “government entities with separate legal identities and substantial autonomy, including discretion over the volume and composition of their expenditures and a direct source of revenue... Such entities are often established to carry out specific functions, such as road construction or the non-market production of services. These entities are considered to be separate government units where they maintain full sets of accounts, own goods or assets in their own right, engage in non-market activities for which they are accountable at law, and are able to incur liabilities and enter into contracts. Such entities (together with non-profit institutions controlled by government) are known as extra budgetary units because they have separate budgets, receive substantial transfers from the main budget, and their primary sources of finance are supplemented with own sources of revenue that fall outside the main budget. These extra budgetary units are classified to the general government sector unless they are predominantly market producers controlled by another government unit”.

Whilst primary units are always part of the general government sector, extra budgetary units being potentially included in the general government sector may be in fact part of one of these different sectors: corporations, non-profit institutions serving households or general government. Therefore, checking if a unit belongs to the general government sector is only systematically done for extra budgetary units.
2.3- Approach adopted to delineate the general government sector

Every extra budgetary unit that may belong to the general government sector is checked in conformity with ESA 2010. In summary the conditions are as follows:

1- Is it an institutional unit?
2- Is it controlled by general government?
3- Application of the 50% criterion\(^5\): is the unit a market or non-market producer?\(^6\)

Diagram 1: Decision tree of ESA 2010 to identify those extra budgetary units belonging to the general government sector

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\(^5\) In comparison to ESA 95 the 50% criterion used to perform the market / non-market test now considers in the production costs also the costs of capital which may in general be approximated by the net interest charge.

\(^6\) However, to identify ancillary units of the general government an additional step had to be implemented in practice: is the unit making more than 80% of its turnover with general government?)
So using the decision tree, and in conformity with National Accounts criteria regarding the sector classification of units the following cases are possible:

Table 1: possible sector classifications when using the ESA 2010 decision tree to identify those extra budgetary units belonging to the general government sector

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Sector classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it an institutional unit?</td>
<td>Yes</td>
<td>The institutional unit belongs to one of the institutional sectors</td>
</tr>
<tr>
<td>Is it an institutional unit?</td>
<td>No</td>
<td>Same sector classification as the controlling unit</td>
</tr>
<tr>
<td>Is it an institutional unit that is controlled by government?</td>
<td>Yes</td>
<td>The unit is public and could be part of the general government or corporation sector</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>The unit is private and could be part of the corporation sector or the non-profit institutions serving households</td>
</tr>
<tr>
<td>Is it an institutional unit that is controlled by government and a non-market producer?</td>
<td>Yes</td>
<td>The public unit is part of the general government sector</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>The public unit is part of the corporation sector</td>
</tr>
</tbody>
</table>

2.4- Institutional unit

The first step to check whether an extra budgetary unit belongs to general government is to check whether the entity is an institutional unit.

The term of institutional unit is an essential definition in National Accounts. ESA 2010 defines “an institutional unit as an economic entity characterised by decision-making autonomy in the exercise of its principal function. A resident unit is regarded as constituting an institutional unit in the economic territory where it has its centre of predominant economic interest if it has decision-making autonomy and either keeps a complete set of accounts, or is able to compile a complete set of accounts. To have autonomy of decision in respect of its principal function, an entity must be:

7 According to paragraph 2.112 of ESA 2010: “the institutional units included under sector 5.13 are for example the following:
- general government units which exists through a legal process to have judicial authority over other units in the economic territory, and administer and finance a group of activities, principally providing non-market goods and services, intended for the benefit of the community;
- corporation or quasi-corporation which is a government unit, if its output is mainly non-market and a government unit controls it;
- non-profit institutions recognised as independent legal entities which are non-market producers and which are controlled by general government; etc.
• entitled to own goods and assets in its own right; it will be able to exchange the ownership of goods and assets in transactions with other institutional units
• able to take economic decisions and engage in economic activities for which it is responsible and accountable by law
• able to incur liabilities on its own behalf, to take on other obligations or further commitments and to enter into contracts; and
• able to draw up a complete set of accounts, comprised of accounting records covering all its transactions carried out during the accounting period, as well as a balance sheet of assets and liabilities”.

The institutional unit check requires metadata about the units to be tested and the unit controlling it to be able to verify whether the unit has the autonomy of decision. Relevant information can be found for instance in establishment acts.

2.5- Public control

The second step is to check whether the extra budgetary unit is under public control.

According to ESA 2010 control over a unit is the ability to determine the general policy or program of that entity. In paragraph 2.38 of ESA 2010 “general government secures control over a corporation as a result of special legislation, decree or regulation which empowers the government to determine corporate policy. The following indicators are the main factors to consider in deciding whether a corporation is controlled by government:

a. government ownership of the majority of the voting interest;
b. government control of the board or governing body;
c. government control of the appointment and removal of key personnel;
d. government control of key committees in the entity;
e. government possession of a golden share;
f. special regulations;
g. government as a dominant customer;
h. borrowing from government.”

The public control check requires metadata about the units to be tested and the unit controlling it. Again, relevant information can be found for instance in establishment acts.
2.6- **Market/non-market test (application of the so-called 50 % criterion)**

For extra budgetary units, it is necessary to undertake a market/non-market test in order to distinguish between market producers which charge economic significant prices and non-market producers. As stipulated in ESA 2010, the ability to undertake a market activity will be checked notably through the usual quantitative criterion (the 50 % criterion), using the ratio of sales\(^8\) to production costs\(^9\). To be market producer, the public unit shall cover at least 50 % of its costs by its sales over a sustained multi-year period.

2.7- **Data sources used to perform the market/non-market test**

The 50 % criterion can be tested if the relevant budgetary data are available. To perform the test data of different statistics are being used, as in practice the extra budgetary units are collected through several different data collections:

- for universities and other higher education entities the higher education finance statistics
- for units using commercial accounts with double entry bookkeeping the statistics for public funds, institutions and enterprises
- for R&D performing units controlled or partially financed by the general government sector the statistics on expenditure of public institutions and institutions receiving public funding on science, research and development
- for those remaining extra budgetary units employing cameralistic accounts the quarterly cash and annual finance statistics.

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\(^8\) For the market/non-market test, sales of goods and services correspond to sales receipts, in other words to the market output increased by payments for non-market output, if any. Own-account production is not considered as part of sales in this context. Sales exclude also all payments received from government unless they are granted to other producers undertaking the same activity (paragraph 20.30 of ESA 2010).

\(^9\) Production costs are the sum of intermediate consumption, compensation of employees, consumption of fixed capital and other taxes on production. For the purpose of the market/non-market test, production costs are increased by the net interest charge and decreased by the value of any imputed production, notably own-account production. Subsidies on production are not deducted (paragraph 20.31 of ESA 2010).
3- Register of public units (BKM):

Both, Government Finance Statisticians and National Accountants face the challenge to delineate general government accurately. Ideally, the objective would be the same delineation of general government in National Accounts and in public finance statistics. To achieve it means first to identify all several thousand units potentially belonging to the general government sector and then to check them according to the approach presented in chapter 2. To stock them together with relevant metadata a register of public units (BKM) was developed by Government Finance Statisticians.

3.1- How to identify extra budgetary units in practice?

First of all, an overview of all government units is needed. It is quite easy for instance to determine the primary units of the central or regional government subsectors or the different branches of social security. It becomes a little bit more difficult to get all primary units of the local government subsector (municipalities, councils etc.). But, to get lists of extra budgetary units was so far much more complex, as there was no obligation for newly established units to register within the statistical system until the entry into force of the revised law on the statistics on public finance and public service personnel (FPStatG)¹⁰ in December 2013.

To compile information about these relevant extra budgetary units intensive research had to be undertaken until now. Important research sources are:

- holding reports of the authorities of the Federation, the Länder or the municipalities/associations of municipalities;
- commercial registers;
- enterprise data bases;
- establishments created under public law;
- preliminary surveys (concerning spin-offs, shareholdings).

Since the beginning of 2014 the revised legal basis allows even a data collection¹¹ to request information from primary and extra budgetary units about their equities. It is likely that this survey is going to considerably simplify the update of the BKM.

¹¹ so called Grundbefragung.
3.2- Delimitation of the public and general government sector

Once all extra budgetary units potentially belonging to the general government sector have been identified, the three step approach of National Accounts that was introduced in chapter 2 of this paper has to be carried in order to get a precise sector classification. Only those units under government control are being registered in the BKM. So, all units of the BKM correspond to the public sector which in National Accounts is equivalent to the general government and the public corporations. As the BKM contains any public unit it includes in principle all primary and extra budgetary units. The general government sector itself is only a subset of the BKM. Thus, the exhaustiveness of the BKM is a crucial issue for a complete delineation of the general government sector.

The content of the BKM is illustrated through the diagram below. The inner frame contains the primary units of all general government subsectors. The medium frame shows the extra budgetary units which are non-market producers and therefore are part of the government sector. The outer frame covers all those entities from the public sector which are market producers and therefore belong to the corporation sectors (S.11/S.12). The two outer frames altogether correspond to all public units being extra budgetary units.

Diagram 2: delineation of general government sector within the public sector (so called shell concept of german public finance statistics)
3.3- Information contained in the register of public units (BKM)

The BKM contains for every public unit the following metadata:

- sector classification (general government, non-financial corporations, financial corporations)
- structure of owners (that feature is relevant especially to determine the general government subsector of the unit as the unit is classified to the subsector owning more than 50 % of the unit)
- branch of activity according to the NACE classification
- accounting standard (commercial account or cameralistic)
- legal form etc.

The basic structure of the BKM distinguishes between primary units (i.e. core budgets) and extra budgetary units (i.e. public funds, institutions and enterprises). Moreover, the extra budgetary units are further grouped:

- by their legal form, which may have a public or private legal status.
- by distinguishing whether they are legally dependent or autonomous.

3.4- Influence of business demography on the content of the BKM

Once, public units are registered in the BKM it has to be recalled that, because of business demography, the number of public units can vary considerably over time. Obviously, this variability is likely to increase the longer the time span (trimester, year, decade etc.) observed. Determinants impacting on the number of public units were introduced at the beginning of this paper. When focusing on a BKM perspective, in addition to the real birth and real death of a public unit, there are several other factors responsible for an increase or reduction of the number of public units:

- changes in the ownership structure,
- mergers,
- company takeovers,
- spin-offs (outsourcing of tasks from the core budgets to public funds, institutions and enterprises) or
- rarely incorporations (re-integration of tasks from extra budgetary units into the primary units).\(^\text{12}\)

An analysis carried out for the years from 2002 to 2012 for extra budgetary units of BKM whose main owner is the central government subsector shows that the access into the BKM mainly

\(^{12}\) For further details see Heil, N.: „Classification of the stock of public funds, institutions and enterprises of the Federation by demographic events“, Wirtschaft und Statistik 10/2013, pages 715-719.
depends on the creation of new units (i.e. real enterprise birth). Spin-offs and acquisition of shareholdings occurred on a limited scale. Exiting the BKM is primarily due to a change in the ownership structure (i.e. privatisation of the former public unit). Real enterprise deaths and mergers/company takeovers are also quite frequent events.

Although business demography tend to be more dynamic for extra budgetary units, the number of primary units also evolves over time as shows a glance into the history of the Republic of Germany. Considering a time span from 1949 onwards the following changes occurred to primary units belonging to general government:

- there was no change to register as only one primary unit exists for the core budget of the Federation (central level of government).
- the number of primary units at the level of the Länder increased because of the fusion of Baden-Württemberg, the joining of Saarland and of the five new Länder.
- the number of primary units at local level of government changed as there were two waves of important community reforms responsible for the reduction of the number of primary units of the municipalities/associations of municipalities. They occurred in the 60s/70s in the Federal Republic of Germany and after the reunification in the 90s in most of the new Länder.
- the number of primary units at social security level diminished in recent years because of several mergers of statutory health insurance units.

3.5 - Reclassification of units and number of units stored in the BKM by general government subsectors

As described before the sector classification is a dynamic process and is checked and updated annually. In the last years the number of units that had to be reclassified was on average around 120 units. With the introduction of new National Accounts standards in September 2014 the number of reclassified units will be larger due to different reasons:

- adaptation of the 50% criterion
- inclusion of non-profit institutions (mainly R&D performing units)
- public holding companies (i.e. public head offices).

In total 787 units will join general government sector with the introduction of the new ESA and 374 will leave to other sectors (mainly to non-financial corporations). However, it has to be underlined here that many of those units are small and only quite a few units (e.g. “bad banks (First Winding-Up Agency) etc.) included to the general government sector in the last few years had the potential to significantly impact the indicators being used for fiscal surveillance.
The following table gives an overview of the number of units by subsectors at the beginning of the year 2014:

Table 2: overview of the number of primary and extra-budgetary units contained in the BKM at the beginning of the year 2014

<table>
<thead>
<tr>
<th>BKM</th>
<th>in total:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>about 12 250 primary units and about 17 000 public funds, institutions and enterprises</td>
</tr>
<tr>
<td>Outside General Government</td>
<td>11 200 public funds, institutions and enterprises (classified as public corporations in National Accounts)</td>
</tr>
<tr>
<td>Inside General government</td>
<td>12 250 primary units</td>
</tr>
<tr>
<td></td>
<td>5 800 extra budgetary units</td>
</tr>
<tr>
<td>Central level of government</td>
<td>1 primary unit</td>
</tr>
<tr>
<td></td>
<td>105 extra budgetary units</td>
</tr>
<tr>
<td></td>
<td>including: 30 R&amp;D performing units</td>
</tr>
<tr>
<td>Regional level of government</td>
<td>16 primary units (Länder)</td>
</tr>
<tr>
<td></td>
<td>832 extra budgetary units</td>
</tr>
<tr>
<td></td>
<td>including 158 higher education units</td>
</tr>
<tr>
<td></td>
<td>including 71 R&amp;D performing units</td>
</tr>
<tr>
<td>Local level of government</td>
<td>around 12 000 primary units</td>
</tr>
<tr>
<td></td>
<td>4 798 extra budgetary units</td>
</tr>
<tr>
<td></td>
<td>including 8 R&amp;D performing units</td>
</tr>
<tr>
<td>Social Security</td>
<td>235 primary units</td>
</tr>
<tr>
<td></td>
<td>65 extra budgetary units</td>
</tr>
</tbody>
</table>
4- Re-integration

Once the extra budgetary units which belong to general government have been identified as well as stocked and the coverage issues are solved, still remain some questions: how to proceed when compiling general government accounts combining data from several different statistics? How to reconcile financial data stemming from different kinds of accounting standards? How to avoid double counts? The re-integration is a relatively new tool that was implemented during the last major National Account revision in 2011 to tackle these issues. It ensures the budget data harmonisation of primary units with extra budgetary units within the framework of National Accounts.

4.1- What happens when more and more public services are divested from primary to extra budgetary units?

During the last years more and more non-market services, notably in the field of higher education, were divested from the Länder level into newly created extra budgetary units. Though model calculations were being used to alleviate the results of these spin-offs, it was imperative to systematically tackle that issue. However, many large divestures occurring simultaneously have the potential to significantly bias National Accounts aggregates like output, gross value added and final consumption of general government if no preventive measures occur. At the same time the impact on the deficit ratio of general government tend to be negligible.

Suppose for instance that all public universities are spun-off in a year t from the Ministry of Higher Education (e.g. the primary unit) to newly created extra budgetary units. As a consequence some type of revenues (e.g. sales) and expenditures (e.g. compensation of personnel, intermediate consumption) would considerably decrease in the accounts of the primary unit compared to the year t-1, as the revenues and expenditure of the public universities would no longer been shown in the budget data of the Ministry. Instead, a transfer would be included in its budget to cover the expected loss of public universities in year t which means that the transfers would considerably increase compared to the preceding year. In essence, if nothing is done, primary units would become increasingly slim, whereas more and more extra budgetary units would be missing in the delineation of the general government sector. The result would be a shift from a gross recording (i.e. all revenues and expenditures are shown) to a net recording (i.e. only a payable transfer amounting to the deficit of the divested unit is recorded in budget data of the primary unit).

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13 For further details see Schmidt, D.; Schmidt, P.: „Re-integration as a measure to secure the quality of general government results in National Accounts“, Wirtschaft und Statistik 10/2011, pages 957-966.
4.2- Approach adopted to re-integrate divested extra budgetary units into the general government sector

Let's assume that the divested units at the Länder level are institutional units that are publicly controlled and non-market producers as is in general the case for public universities. The universities have been identified as extra budgetary units, tested as belonging to the general government and the data source is the higher education finance statistics.

Thus, the objective is to design a framework to enable:

- the complete compilation of the revenue and expenditure side of government accounts
- the flows between primary and extra budgetary units have to be identified and consolidated to avoid double counting
- the unbiased calculation of gross value added, output and final consumption of the general government sector, ideally in a breakdown by branch of activities according NACE\textsuperscript{14} 2008 and functions of government according to the COFOG\textsuperscript{15} classification.

The only remaining issue is to find an approach to reconcile the data of the primary unit (e.g. the Ministry of Higher Education) with those of the extra budgetary units (e.g. the public universities).

The adopted approach consists in the three following steps:

1. **Development of a consistent data set** which is necessary as the accounting frameworks inside the general government differ in particular between the primary and the extra budgetary units.
2. **Re-integration** which signifies an additional calculation in order to integrate the data sets of the extra budgetary units into the already existing accounting framework of the general government sector.
3. **Consolidation** between the extra budgetary units and the primary unit(s) (within each government subsector) as is done as well between the subsectors to get a sector. The transactions which are consolidated are the current and capital transfers as well as the payable interest.

\textsuperscript{14} NACE: Classification of economic activities in the European Union.

\textsuperscript{15} COFOG: Classification of the Functions of Government.
The two latter steps are illustrated in the diagram below:

Diagram 3: re-integration of extra budgetary units into the general government sector

<table>
<thead>
<tr>
<th>Primary units</th>
<th>Extra budgetary units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compensation of employees</strong></td>
<td><strong>Compensation of employees</strong></td>
</tr>
<tr>
<td>250</td>
<td>150</td>
</tr>
<tr>
<td><strong>Intermediate consumption</strong></td>
<td><strong>Intermediate consumption</strong></td>
</tr>
<tr>
<td>180</td>
<td>120</td>
</tr>
<tr>
<td><strong>Gross capital formation</strong></td>
<td><strong>Gross capital formation</strong></td>
</tr>
<tr>
<td>120</td>
<td>80</td>
</tr>
<tr>
<td><strong>Net worth</strong></td>
<td><strong>Net worth</strong></td>
</tr>
<tr>
<td>500</td>
<td>100</td>
</tr>
<tr>
<td><strong>Transfers to Extra-budgetary units</strong></td>
<td><strong>Transfers from Primary units</strong></td>
</tr>
<tr>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td><strong>Σ</strong></td>
<td><strong>Σ</strong></td>
</tr>
<tr>
<td>800</td>
<td>800</td>
</tr>
</tbody>
</table>

Consolidation by elimination of transfers paid to extra-budgetary units

Units grouped to general government sector

| **Compensation of employees** | **Non-market output** |
| 400                          | 300                   |
| **Intermediate consumption** | **Net worth** |
| 300                          | 500                   |
| **Gross capital formation** | **Σ**                 |
| 200                          | 900                   |
| **Σ**                        | **Σ**                 |
| 900                          | 900                   |

Consolidation by elimination of transfers received from primary units

4.3- Data sources used to re-integrate extra budgetary units into the general government sector

Extra budgetary units are in practice scattered through several different data collections. Therefore, budget data of extra budgetary units belonging to the general government sector are compiled using information contained in:

- the higher education finance statistics for those higher education institution (e.g. universities etc.) being extra budgetary units of the general government sector,
- the statistics for public funds, institutions and enterprises for all those extra budgetary units using commercial accounts with double entry bookkeeping,
- the statistics on expenditure of public institutions and institutions receiving public funding on science, research and development for those public institutions being extra budgetary units and doing research besides,

Note that not every higher education institutions or R&D performing unit belonging to general government is an extra-budgetary unit as some of them may be part of primary units.
• the quarterly cash and annual finance statistics for those remaining extra budgetary units employing cameralistic accounts (in fact this category comprises mainly special funds of central and regional levels of government) and being collected in practice together with the primary units.

**Outlook:**

As shown in this paper, the complete identification and correct sector classification of extra budgetary units according to National Accounts criteria is crucial to delineate accurately the general government sector. With the BKM a powerful register for public units with many features that facilitate the breakdown between public and general government sector is being used. On average, the reclassification of units amounted to about 120 units annually for the past few years which is less than 0.4% of all public units. In 2014, the major revision due to the implementation of ESA 2010 has been an opportunity for German statisticians to check systematically all units potentially belonging to the general government sector. It led to a reclassification of 4% of all public units, of which 2.7% accessed and 1.3% exited the general government sector. However, the impact on the deficit and debt ratio of general government due to reclassifying public units is rather negligible, as most of these units are small.

In general, the methodological work that was carried out during the last major revision of National Accounts in 2011 was quite a success as both the approach to systematically use the BKM for sector classification matters and the introduction of the re-integration had a positive impact in the past EDP notifications.

The BKM as the register of public units stores important information about extra budgetary units and its owners. It has proven to be reliable to achieve a complete coverage of general government sector. However, to keep it à jour regularly is quite time consuming and necessitates qualified staff at central and regional statistical offices. Hopefully, the revision of the legal basis (FPStatG) that entered into force at the end of 2013 is going to considerably simplify the update of the public units register as in the future an annual survey will request information from primary and extra budgetary units about their equities.