



EUROPEAN COMMISSION
DIRECTORATE-GENERAL
REGIONAL POLICY

**REVISED GUIDANCE NOTE ON ARTICLE 55 FOR ERDF AND CF
OF COUNCIL REGULATION (EC) NO 1083/2006:
REVENUE-GENERATING PROJECTS**

DISCLAIMER:

This is a document prepared by the Commission services. On the basis of the applicable EU law, it provides technical guidance for the public authorities, practitioners, beneficiaries or potential beneficiaries, and other bodies involved in the monitoring, control or implementation of the Cohesion policy on how to interpret and apply the EU rules in this area. The aim of the document is to provide Commission services' explanations and interpretation of the said rules in order to facilitate the implementation of operational programmes and to encourage good practice(s). However this guidance note is without prejudice to the interpretation of the Court of Justice and the General Court or evolving Commission decision making practice.

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1. BACKGROUND

Article 55 of Regulation (EC) No 1083/2006 (hereafter "Article 55") defines for projects which generate revenue how revenue must be taken into account in the determination of eligible expenditure for a contribution from the Funds and in the determination of deductions from the expenditure declared to the Commission.

During 2007-2010, a number of difficulties have been highlighted in connection with the application of the provisions of Article 55 of Regulation (EC) No 1083/2006, including a disproportionate administrative burden, especially with small financial volumes financed by the ERDF or the Cohesion Fund and monitoring and treatment of funds to be reimbursed by operations. In light of the objectives of the Cohesion Policy, the Commission considered it necessary to address these difficulties by amending the Regulation (EC) No 1083/2006.

The objective of this note is to give guidance on Article 55 for ERDF and Cohesion Fund operations by taking also into account:

- Annex XXI of Regulation (EC) No 1828/2006, that is the application form to be used for major projects seeking co-funding from the ERDF and the Cohesion Fund;
- The "Guide to cost-benefit analysis of investment projects" prepared for Commission services (hereafter the "CBA guide"); and
- Commission services' working document n° 4 Guidance on the methodology for carrying out cost-benefit analysis (hereafter "Working document n° 4").

2. THE RATIONALE FOR THE CALCULATION OF THE "FUNDING-GAP"

2.1. Article 55(1): Identification of Revenue generating projects

“For the purposes of this Regulation, a revenue-generating project means any operation involving an investment in infrastructure the use of which is subject to charges borne directly by users or any operation involving the sale or rent of land or buildings or any other provision of services against payment.”

The objective of this section is to identify the operations for which revenue has to be taken into account. This is required in order to determine the maximum amounts eligible for a contribution from the Funds to these projects.

Net revenue *reduces* the funding gap which can be considered as eligible expenditure. In the last programming period revenue was taken into account to identify the maximum co-funding rates of assistance applicable whereas in the current period revenue reduces proportionally the maximum eligible expenditure.

In order to clarify what is meant by revenue, it is necessary to describe the funding-gap method, along with its objectives and key steps.

2.1.1. Allowing for Revenue in the Calculation of a public intervention

The objective of considering revenue in the financial analysis is to define that part of the investment costs which can be financed by the project itself (through tariffs, tolls, etc.) in order to identify the part of the investment costs, if any, which needs to be financed by the public contribution (e.g. direct grants, shadow tolls, etc.). In particular, the public contribution aims to ensure a specific level of investment financial profitability.

The method used to determine the contribution from the Funds to revenue-generating projects is the so-called "funding-gap" method. The funding-gap is the difference between the current value of project investment costs and net revenue. Thus, the funding-gap expresses the part of the project investment costs which cannot be financed by the project itself and that therefore needs to be financed from programme contributions. This method is used to ensure firstly that the project has enough financial resources to be implemented without being over-financed, and secondly that it achieves a minimum level of profitability so that beneficiaries can bear the cost of capital needed in addition to public support¹.

2.1.2. Investment Financial Profitability

"Investment financial profitability" is the ability of the project to generate additional financial resources compared to those invested, *independently* of how the project is going to be financed. In other words, it is the ability of the project in itself to generate financial returns without considering the cash flows due to loans, private equity, or government contributions (e.g. grants). One of the key indicators of the investment financial profitability is the financial net present value given by the difference between project discounted net revenues² and project investment costs derived from a cash-flow analysis³⁴.

2.1.3. Investment costs

Investment costs are reflected in the cost benefit analysis and in the funding gap calculation, according to their eligibility.

Over time the investment costs might be subject to variations. They might increase or decrease. In case of decreasing costs the funding gap is smaller and the managing authorities are encouraged to take care that projects are not over-financed and programme resources are wherever possible made available for allocation to additional projects.

¹ The part of investment costs "covered" by the discounted net revenues can in fact be financed by borrowing money.

² Discounted net revenue is equal to the difference between (a) the sum of discounted revenue and discounted residual value and (b) discounted operating and maintenance costs.

³ This implies that expenditure such as depreciation must not be taken into account. This exclusion is also justified because the related money aims to replace the investment beyond its time horizon. If depreciation is taken into account then the EU would finance both the present and the future investment.

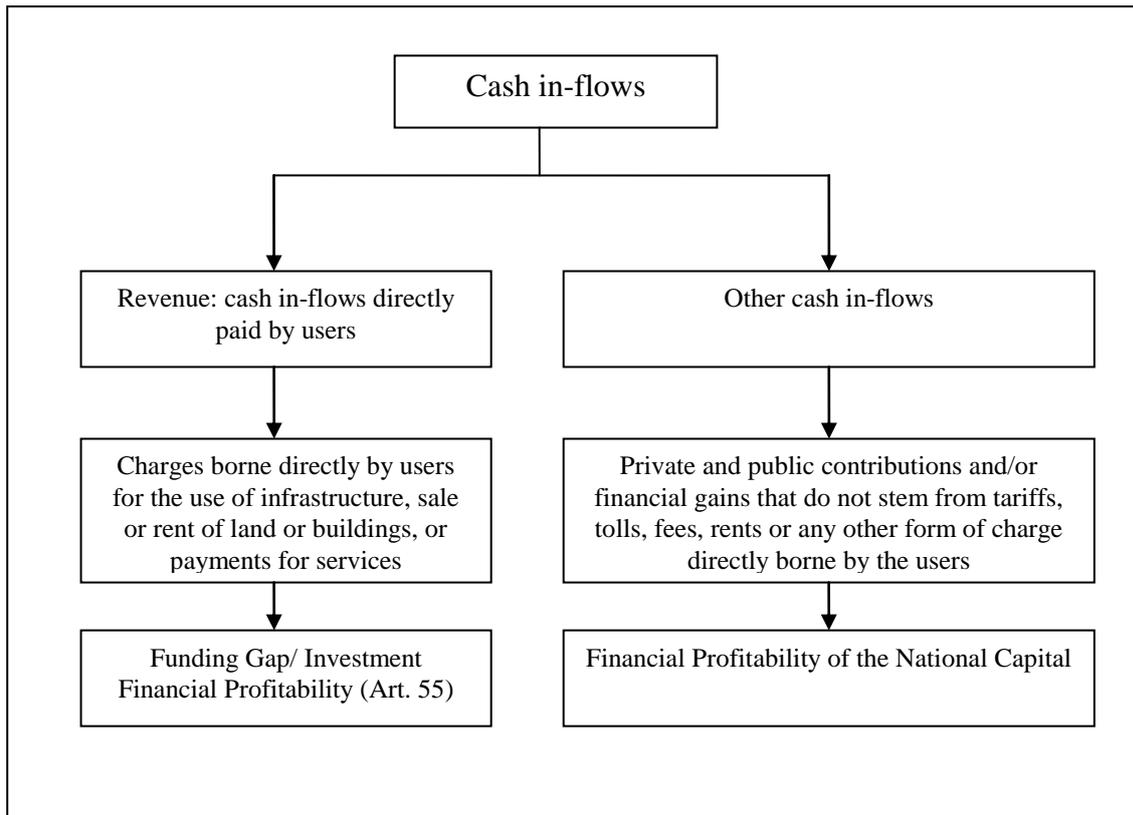
⁴ From the above statement, the funding-gap method is to be based on the profitability of the investment. This means that in general, costs and revenues are those accruing to the investor. However, when the owner and the operator are not the same, a consolidated financial analysis needs, in general, to be carried out. This would be the case in order to assess the actual profitability of the investment independently of the cash-flows between investors and operators. In this case, clearly the revenue to be taken into account in the funding-gap is that of the operator. Consolidated analyses should also be carried out in cases where different parts of infrastructure are managed by different operators.

2.1.4. Classification of Cash in-Flows

Cash in-flows can be divided into:

- Revenues, that is, cash in-flows *directly paid by users* for the goods and/or services provided by the project, such as charges borne directly by users for the use of infrastructure, sale or rent of land or buildings, or payments for services;
- Other cash in-flows, that is, private and public contributions and/or financial gains that do not stem from tariffs, tolls, fees, rents or any other form of charge directly borne by the users.

Figure 1: Revenue and other Cash in-Flows



In order to facilitate the understanding of the above concepts, some examples are set out below which concern the three different categories of revenue-generating projects mentioned in Article 55(1)⁵:

An "infrastructure the use of which is subject to charges borne directly by users"

Highways

- Revenues: tolls charged to drivers to use highways.
- Other cash in-flows: shadow tolls from government to project operators or revenue from road user charges (*vignettes*) not allocated to the financing of a specific project⁶.

⁵ Examples are given on a purely illustrative basis. Taking into account the variety of operations concerned, individual cases may not fit exactly with the framework presented here. However, independently of the category to which they belong, all revenue-generating projects remain subject to the same rules.

Railways

- Revenues: fares paid by travellers⁷.
- Other cash in-flows: government contributions towards operating costs.

"any operation involving the sale or rent of land or buildings"

Technological Parks

- Revenues: prices or rents paid by the users to use the buildings and payments by users for other services provided by the project.
- Other cash in-flows: contribution of private equity, gains from loans.

Cultural buildings

- Revenues: rents for exhibitions, etc.
- Other cash in-flows: subsidies from public bodies or private donors.

"any other provision of services against payment"

Waste Water Treatment and Waste Treatment

- Revenues: tariffs paid by users.
- Other cash in-flows: contribution of private equity.

Conclusions:

Only revenues defined as cash in-flows directly paid by users, from sale or renting of land and buildings and provisions of services against payment have to be taken into account in the determination of the funding-gap as defined in Article 55(2). Any such project is revenue generating. It has to be determined then if the project has positive or negative net revenue. A project generating negative net revenue is not a revenue generating project and has a 100% funding gap. Other cash in-flows must not to be included in the determination of the funding-gap although they may be considered in the analysis of the national capital profitability.

2.2. Article 55(2): The Funding-gap Method

⁶ Road user charges (*vignettes*) are regulated by Directive 1999/62/EC, as last amended by Directive 2006/38/EC. The revenues from the tolls are always attributed to a project, however the revenues from vignettes must be analysed in order to establish whether they are attributable to the project. If the competent authorities have decided to attribute vignettes' revenues to a project on a pro-rata basis so that revenue generated from vignettes is reallocated back to the repayment of loans associated with the project or is used to cover the maintenance and operation costs, these should be taken into account.

⁷ Taking into account the variety of situations in the Member States as regards the rail market, it is possible that the fees paid by railway operators (track access charges) should be considered as revenue within the meaning of Article 55(1) instead of fares paid by travellers. In principle, if a project has more than one operator, the revenue that needs to be considered for the calculation of the eligible expenditure is that directly paid by the operators through charges.

"Eligible expenditure on revenue-generating projects shall not exceed the current value of the investment cost less the current value of the net revenue from the investment over a specific reference period for:

- (a) investments in infrastructure; or
- (b) other projects where it is possible to objectively estimate the revenues in advance.

Where not all the investment cost is eligible for co-financing, the net revenue shall be allocated pro rata to the eligible and non-eligible parts of the investment cost.

In the calculation, the managing authority shall take account of the reference period appropriate to the category of investment concerned, the category of project, the profitability normally expected of the category of investment concerned, the application of the polluter-pays principle, and, if appropriate, considerations of equity linked to the relative prosperity of the Member State concerned."

2.2.1. Eligible Expenditure and the Funding-gap

According to the first sentence of Article 55(2), eligible expenditure cannot exceed the difference between current⁸ investment costs and current net revenue, that is, the project funding-gap. "Current" is synonym to "discounted". The funding gap calculation is designed to calculate the level of the grant needed to carry out the project. It requires a rigorous application of the CBA principles and the choice of key parameters such as the discount rate and the time horizon are crucial. The method is described in detail in working paper No 4 on the Cost benefit Analysis (http://ec.europa.eu/regional_policy/sources/docoffic/working/sf2000_en.htm)

In formulas, this may be written as:

$$\max DEE = DIC - DNR = FG \quad (1)$$

where DEE is the discounted eligible expenditure⁹;

FG is the funding-gap;

DIC is discounted investment cost;

DNR is discounted net revenue.

According to Article 55(2) it is "the net revenue from the investment" which needs to be considered. This means that it is only the incremental net revenue (see definition of working paper chapter 2.2.2) generated by the investment that is taken into account in the calculation of the funding gap. The incremental net revenue is the difference between the revenue and the operating costs of two project scenarios ("with the project" and "without the project").¹⁰ The costs to be taken into account in the calculation of the funding-gap should include running costs (e.g. labour, raw materials, electricity), maintenance expenses and costs for the replacement of project short-

⁸ Note that *current* value is a synonym of *discounted* value. In this regard, it is worth noting that Working document n° 4 states that a 5% financial discount rate in real terms may be used as indicative benchmark but can be modified in a fair and transparent manner by Member States as indicated in working paper 4 on Cost Benefit analysis.

⁹ Because it is derived from discounted values, eligible expenditure in this context is a discounted value.

¹⁰ All the cash-flows considered for the calculation of the funding-gap must be based on the incremental approach.

life equipment. Financing costs (e.g. interest payments) and depreciation should be excluded (the latter is not a cash-flow). When VAT is recoverable, the costs and revenues should be based on figures excluding VAT.

Projects whose revenue is lower than operating costs: Where a project's revenue is less than its operating costs (i.e. negative net revenue), it cannot obviously contribute to financing the project investment costs indirectly by borrowing money or attracting capital from investors.¹¹ Therefore, since the objective of the funding-gap method is to identify the part of the project investment cost which cannot be financed by the project itself, for projects with negative net revenue there is no need to apply the funding-gap method. Because operating costs are not covered by revenue, an analysis of the financial sustainability is required to verify that throughout the project's time horizon there is enough cash to cover the related expenditure.

For the purpose of determining whether or not an operation is a revenue-generating project within the meaning of Article 55(1), and whether or not it is necessary to apply the funding-gap method, the residual value of infrastructure does not need to be considered. For example, an investment in a new road, which is not subject to tolls or other user charge revenue, would not become revenue-generating only due to residual value of the road at the end of the reference period. However, where it is determined that a project will generate revenue within the meaning of Article 55(1), and where this revenue can be objectively estimated in advance by applying the funding-gap method i.e. the project earns positive net revenue, the residual value must be taken into account in that calculation.

It should be noted that operating cost-savings generated by the projects must be considered in the funding-gap calculation. Operating cost-savings can be ignored where it can be demonstrated that they are offset by an equal reduction in operating subsidies. If the reduction of the operating subsidies does not cover the whole amount of the operating cost-savings, the remaining part of the operating cost-savings must be included in the funding-gap calculation.

2.2.2. Pro Rata Allocation

"Where not all the investment cost is eligible for co-financing, the net revenue shall be allocated pro rata to the eligible and non-eligible parts of the investment cost."

The eligibility of expenditure is subject to the provisions of Regulation (EC) No 1083/2006¹² and the legislation governing the individual Funds¹³. In this regard, the second subparagraph of Article 55(2) provides that when not all the investment cost¹⁴ is eligible then a proportional part of the net revenue is not to be taken into account in the calculation of the funding-gap. For example, if only 80% of the discounted investment costs is eligible¹⁵, which means that 20% of the discounted investment costs are not eligible, then 20% of the discounted net revenue must also not be

¹¹ If the operation generates operating cost-savings these are considered as revenues in the calculation of the funding-gap.

¹² See Article 56. Note in particular that Article 56(4) refers also to eligibility rules laid down at national level.

¹³ In particular: for the ERDF, see Article 7 of Regulation (EC) No 1080/2006; for the Cohesion Fund, see Article 3 of Regulation (EC) No 1084/2006.

¹⁴ It is to be noticed that the aforementioned provisions also include rules for the eligibility of costs during the project operating stage.

¹⁵ Of course, in order to make the comparison possible discounted investment costs need to be compared with discounted eligible costs.

considered in the funding-gap. This means that both the discounted net revenue and investment costs should be multiplied by 80%.

2.2.3. Categories of Investment and Reference Period

"In the calculation, the managing authority shall take account of the reference period appropriate to the category of investment concerned, the category of the project (...)"

The reference period or project time horizon is the number of years of the economic life, that is, the time period beyond which the investment needs to be replaced (See Working document n° 4 p. 7).

Managing authorities shall duly take into account the reference period since the longer is time horizon, the higher the net revenue to be taken into account in the calculation of the funding-gap. However, it should be borne in mind that: (a) net revenue accruing far in the future is progressively less important because of discounting; (b) the residual value is a proxy of the remaining revenues.

2.2.4. Profitability Normally Expected for Categories of Investment

"In the calculation, the managing authority shall take account of (...) the profitability normally expected of the category of investment concerned (...)"

In order to explain what it is meant for profitability normally expected for categories of investment, one should consider in greater detail the concept of financial investment profitability previously introduced in sub-section 2.2.2 through the following numerical example.

Numerical Example

As stated in section 2.2.1, investment profitability can be defined as the ability of the project to generate additional financial resources (i.e. profits) compared to those invested. In this regard, one indicator which can be used is the financial net present value of the investment (FNPV/C), that is the difference between the discounted net revenue and discounted investment cost which can be written (using the same notation used so far) as:

$$FNPV / C = DNR - DIC \quad (2)$$

Assume now for simplicity that a project lasts two years. In the first year, only investment cost occurs and it is equal to €1 whereas, in the second year only net revenue arises and it is equal to €3.15. Consider, in addition, that the capital needed could be borrowed through the banking system, and that the related interest rate (i.e. the additional price to be paid for €1) is 5%. Since the net revenue is going to be €3.15 in the second year, then the project promoter could borrow in the first year an amount of money equal to net revenues (€3.15) less the cost of borrowing money, that is, an amount given by the following equation:

$$DNR = \frac{3.15}{(1 + 0.05)} = 3 \quad (3)$$

It is possible to see from equation 3 that the project promoter can borrow up to €3 in the first year, and be able to pay back in the second year an amount equal to €3*(1.05)= €3.15. Thus, using the value taken from 3 in equation 2 we find that the financial net present value of the investment considered here is equal to:

$$FNPV / C = \frac{3.15}{(1 + 0.05)} - 1 = 2 > 0 \quad (4)$$

According to equation 4, the project promoter will be able to pay back the capital needed including its costs, and gain also additional financial resources (€2): the project considered here is thus *able to generate profits*.

Factors Affecting Financial Profitability of the Investment are those affecting: (a) revenue; (b) investment and operating cost.

As to revenue, it is made of two elements: (a) charges/rent/payments and (b) number of users and/or the quantity of the good/service provided by the project. The former depends on the policy chosen at national/regional/local level, whereas the latter is dependent on the actual and foreseeable demand which can, in turn, be affected by a number of factors¹⁶.

As to investment and operating costs, they also are a product of two elements: (a) the nature of the input (e.g. kind of labour) and therefore its unit price; (b) the related quantities (e.g. number of workers). The nature of the input and its price depend, on the one hand, on the choices made at project level such as technology (incinerator/landfill), location (road across flat or mountain territory) and size (number of highway lanes), and on the other hand, on the structure of the economy and relevant government policies affecting the project through input prices and quantities (electricity prices and energy policy; availability of unskilled workers and labour policy).

Considering all the factors mentioned above, a specific level of profitability may not be established either across sectors of investment or across Member States. However, if the aforementioned factors are broadly homogenous (for example, for projects in the same sector of investment and implemented in the same macro-region, where the structure of the economy and government policies are similar), a normally expected profitability may be identified.

Knowledge of the normally expected profitability may be important to shed light on the approximate financing scheme (e.g. the mix between grant-loan) required for the project considered. To this end, it is worth noting that Working document n° 4 emphasizes (p.14), for example, that an airport may require relatively low grants (as the funding-gap may be small) whereas water supply and waste water projects may require relatively higher grants although they can still be financed also through loans (as tariffs are levied for these projects). These examples are clearly in contrast to projects which generate no revenues such as non-tolled roads whose financing scheme can be based only on grants.

¹⁶ A detailed discussion on factors affecting revenue will be set out in Section 4.2.

2.2.5. Polluter Pays Principle

In the calculation, the managing authority shall take account of (...) the application of the polluter-pays principle (...)

In the calculation of the funding-gap, Article 55 (2) requires that the managing authority must also take into account the application of the polluter-pays principle. This means that the external costs generated by pollution must be paid by the polluter even though there are not always repercussions on tariffs paid by the users. Examples of external costs are set out below.

Waste Treatment Plants. Waste treatment plants may generate air pollution (e.g. smoke from incinerators), soil and water pollution (liquids from landfills percolating in underground water). This pollution may affect people's health and values of lands and buildings in the surrounding areas. Tariffs paid by users must also include a part of costs proportionate to the consequences of the pollution generated.

In applying the polluter-pays principle, attention of the managing authorities has to be drawn to the fact that:

- not to apply the polluter-pays principle results in, on the one hand, making polluters gain (e.g. drivers paying cheaper tolls for highways) and, on the other hand, generating losses for citizens in the areas affected by the pollution;
- the application of polluter-pays principle, especially when it results in prevention/mitigation measures, may increase consensus from the local population which for some projects (e.g. waste treatment plants) can be essential;
- the application of the polluter-pays principle results in making tariffs higher; to this end, it is advisable that, equity and affordability issues (see next paragraph) are also duly considered when tariffs are set.

2.2.6. Equity and Affordability

In the calculation, the managing authority shall take account of (...) if appropriate, considerations of equity linked to the relative prosperity of the Member State concerned."

When investment financial profitability is taken into account, equity (meaning relative prosperity of the Member State concerned) considerations are concerned with assessing tariff affordability i.e. the capacity to pay tariffs by users. In this regard, a possible solution to ensure affordability is to set tariffs as a percentage of average income or lower group income¹⁷ depending on the existing income distribution of the served area. This justifies a higher Funds participation than the polluter pays principle might suggest.

To this end the Commission's services recommend that managing authorities duly consider tariff affordability because if users will not be in a position to pay the related tariffs then the project may experience shortage of money during its life; in other words, ensuring affordability means also verifying project financial sustainability (i.e. to verify that there is enough cash in each year of the

¹⁷ For some examples of affordability ratios, see Annex II to Working document n° 4.

project time horizon). As with the issue of the normal expected profitability, national authorities can play an important role to identify criteria for setting tariffs.

In addition, it should be noticed that due to the funding-gap method, ensuring tariff affordability might lead to a higher contribution from the Funds. If tariffs are low because users are poorer, the funding-gap will be wider and require a higher contribution from the Funds. This result is consistent with EU cohesion policy (Working document n° 4 of 2006 in Annex II sets some examples of affordability rates. The CBA guide of 2008 in Annex B explains the concept of social discounts).

Conclusions:

The funding-gap is equal to the difference between discounted investment cost and discounted net revenue. Consequently, its application allows: (1) for projects to have sufficient financial resources to be implemented but not to be over-financed; and (2) project promoters to bear the cost of capital needed in addition to grants.

The pro rata allocation of net revenue to eligible cost is carried out by multiplying the funding-gap times the ratio of the discounted eligible cost over discounted investment cost. The resulting amount, the discounted eligible expenditure, multiplied by the co-funding rate identifies the discounted contribution from the Funds from which the related undiscounted value can be derived. When managing authorities calculate the funding-gap, and more generally, the eligible expenditure, it is recommended that the normal expected profitability of the category of the project is considered in order to verify if the appropriate financing scheme (e.g. grant-loan) has been chosen. This implies that managing authorities should either know the figures on normal expected profitability of the category of investment concerned or have guidelines to calculate the said profitability in their context. In this regard, a useful role can be played by national authorities (e.g. Treasury).

3. THE RATIONALE OF DEDUCTIONS

The following section takes into account the amendments of Article 55(3) and (4) by Regulation (EC) No 539/2010.

The amendments to Article 55(3) and (4) intend to simplify the monitoring of revenues and to align it with the overall life-cycle of operational programmes. Therefore, the reference period for monitoring the revenue is limited to the date of submission of the documents under point (a) of Article 89(1) of Regulation (EC) No 1083/2006, i.e. the documents for the closure of an operational programme. The amendments of Article 53(3) and (4) aim at avoiding situations in which net revenues would have to be monitored after the closure of an operational programme and thereby they significantly reduce the administrative burden.

Freed funding can be reallocated to new projects before the end of the eligibility period

The amendments to Article 55(3) and (4) apply retroactively from the entry into force of Regulation (EU) No 539/2010, to all operations to which Article 55 is applicable.

3.1. Deductions

With the exception of those projects subject to the State aid rules (*cf. infra on Article 55(6)*), and also with the exception of operations funded under programmes co-financed by the ERDF or the Cohesion Fund where their total cost is below EUR 1 000 000 (*cf. infra on Article 55(5)*), Article 55 foresees two situations:

- Projects covered by Article 55(2): For these projects the revenue can be objectively estimated in advance, and the funding gap method should therefore be applied. If the funding-gap is established correctly and the conditions of implementation of the project do not change significantly, there is, in principle no need for the managing authority to modify the grant contribution allocated to the project. In case the net revenue from calculated cash inflows is higher than estimated, it is up to the managing authorities to decide to whose benefit the net revenue is to be used. No further monitoring is requested in these cases. If the conditions change, the provisions of Article 55.4 apply (see point 3.4 below).
- Projects covered by Article 55(3): For projects, for which "*it is objectively not possible to estimate the revenue in advance*" the net revenue generated within five years of its completion, has to be deducted from the expenditure declared to the Commission. The five-year reference period is considered as sufficient to determine the net revenue to be taken into account for the calculation of the contribution from the Funds to these projects.

3.2. Article 55(3): Deductions for Projects whose Revenue cannot be estimated in Advance

Article 55(3) as amended by Regulation (EU) No 539/2010 provides that:

"Where it is objectively not possible to estimate the revenue in advance, the net revenue generated within five years of the completion of an operation shall be deducted from the expenditure declared to the Commission."

For some type of projects it is objectively not possible to estimate the revenues in advance. Annex II lists the most relevant cases. Managing authorities have to calculate the funding gap in all reasonably expected types of projects, making use of experience across various programmes.

Whether a project's revenue can be objectively estimated in advance is determined by factors on which tariffs and demand are dependent. This indicative classification is synoptically presented in the following Table.

Table: Classification of revenue in terms of their possibility to be estimated in advance and related factors

Possibility of Revenue Estimation	Tariffs	Estimated Demand
Revenue Estimation Objectively Possible in Advance (Article 55(2))	Clearly Stated Policy Choice Foreseeable Policy	Models and Data Available Expert opinions based on models and data
Revenue Estimation Objectively not Possible in Advance (Article 55(3)).	Lack of data. New demand generated by supply.	Lack of data. Expert opinion highly subjective

For those projects whose revenue cannot be estimated in advance, Article 55(3) envisages a *deduction* linked to the net revenue generated within five years from the completion of an operation. This deduction must be made by the certifying authority from the expenditure declared to the Commission at the latest at the final closure of the operational programme, i.e. at the latest at the time of submission of the documents under point (a) of Article 89(1) of Regulation (EC) No 1083/2006 for the operational programme.

Deductions pursuant to Article 55(3) will be used for net revenue generated within a period of five years based on the monitoring of revenue which had occurred from the completion of the operation up to the date of transmission of the closure documents, and in particular the application for payment of the balance.

Where in exceptional cases the investment stage of the operation is completed *at national non-eligible expenses* after the submission of the documents under point (a) of Article 89(1), i.e. the five years period starts after 31 March 2017, Article 55(3) does not apply to operations.

Net revenue shall be deducted in proportion to eligible cost of operation within investment cost (see chapter 2.2.2) and in proportion to the contribution from the Funds. For example, if the net revenue is €100 and investment cost is €1000, including €900 eligible cost and the EU co-funding rate at priority axis level is 75%, the amount to be deducted is determined as following:

$$100*(900/1000)*75\%=67,5$$

then the deducted amount should be equal to €67,5.

3.3. Article 55(4)

Article 55(4) as amended by Regulation (EC) No 539/2010 provides that:

"Where it is established that an operation has generated net revenue that has not been taken into account under paragraphs 2 and 3, such net revenue shall be deducted by the certifying authority at the latest at the time of submission of the documents under point (a) of Article 89(1) for the operational programme. The application for payment of the final balance shall be corrected accordingly."

Article 55(4) is concerned with deducting net revenue in case an operation has generated net revenue categories that had not been taken into account. Deductions may occur at the latest at the time of submission of the documents under point (a) of Article 89(1) of Regulation (EC) No 1083/2006 for the operational programme, i.e. 31 March 2017 at the latest.

For projects subject to Article 55(2) and art 55(3), deductions in the meaning of Article 55(4) are required where it is established, that:

(a) certain new types of sources of revenue to be generated by the project have not been taken into account in the calculation of the funding-gap and/or new sources of revenues appeared after the calculation of the funding-gap (e.g. a non-tolled road on which tolls are levied afterwards or renting out of space or services. In such cases a project might fall under Article 55 after creation of the revenue and a funding gap calculation would become necessary). If a project generates from already calculated sources income, this income can be higher or lower than envisaged, but it would not require a complete recalculation of the funding gap (unless it has been underestimated on purpose) or

(b) there are changes in the tariffs policy which put in question the confidence which can be placed in the funding gap calculation.

In any case, changes in demand or other external economic factors (such as un-foreseeable price inflation) would not be linked to an inadequate application of the funding-gap method and therefore do not require a deduction^{18/19}.

Under Article 55(4) as amended, it is clarified, that at the moment of submission of closure documents, projects for which it was not possible to apply the funding gap method, following the results of monitoring of their costs and revenue project owners and the managing authority have to calculate the support these projects are entitled to. Eventually existing net revenue needs to be deducted by the certifying authority from the expenditure declared to the Commission, at the latest at the time of submission of the documents under point (a) of Article 89(1) of Regulation (EC) No 1083/2006 for the operational programme. Projects subject to Article 55(3) can not be included in partial closure as defined in Article 88. Projects subject to Article 55(2) should only be proposed for partial closure, if the managing authority has taken appropriate steps to exclude the risk of any need to recalculate the funding gap of these.

3.4. Arrangements for Monitoring and Audit

In order to implement the provisions of Article 55(2) to (4), it is recommended that the managing authority establishes a system for monitoring revenue by the latest until the submission of the documents under point (a) of Article 89(1) for the operational programme.

¹⁸ If it is established that revenues have been systematically underestimated in order to maximize the grant contributions to certain projects, this will constitute an irregularity.

¹⁹ If the Managing Authority or another body of the Member State, before the entry into force of Regulation 539/2010, in good faith entered into contractual arrangements with a third party whereby it provided assurance in a binding manner to its counterpart that if the funding-gap of a project varies up to 10% of the initial calculation it does not lead to a change in the public contribution, these contract should be revised to the extent possible.

The managing authority has a high interest in setting up, as soon as possible in the programming period, an efficient monitoring system for revenue-generating projects. The aim of this requirement is not to impose unnecessarily heavy procedures, but to set up a system which helps to prevent any over-financing of projects, contributes to the most efficient allocation of resources and makes possible, before the end of the eligibility period, the re-allocation of public funding from projects whose costs and revenue were initially not well estimated to other operations within the operational programme. The arrangements for such monitoring systems are in any case to be decided upon by managing authorities.

During their system audits, Commission auditors will obtain assurance that the managing authority has put in place satisfactory systems for identifying revenue generating projects, for correctly calculating the funding gap, for monitoring revenues following completion and for properly taking account of revenues at closure. During audits, Commission auditors, when assessing the adequate selection of projects, will verify that the managing authority has validated for revenue generating projects the correct calculation of the funding gap, which includes all parameters, including investment costs.

Conclusions:

Article 55(4) deals with two scenarios:

- Only projects under Article 55(2) which have additional categories of income resulting in net revenue for the_ following causes: tariff policy changes or sources of revenue not taken into account initially;
- Projects for which revenue cannot be estimated in advance shall determine the amount of eligible expenditure based on monitoring up to five years after completion of the operation or the latest at the submission of the documents under point (a) of Article 89(1) for the operational programme.

As to the rationale and the timeframe for deductions, it has been emphasised that: (a) according to Article 55(4) deduction has to be proportionate to the contribution from the Funds; (b) such a deduction is equal to the difference between the contribution from the Funds calculated in advance and that calculated on the basis of the monitored revenue; (c) this deduction will be done on the basis of a monitoring of revenue the latest at the moment of submission of the documents under point (a) of Article 89(1) for the operational programme.

A system for monitoring revenue, possibly based on existing systems, by managing authorities or by beneficiaries is the best solution to ensure the correct implementation of Article 55 and the best use of the Funds. By identifying unplanned revenues or deviations from the initial investment cost estimates during the implementation period of the programme, funds reclaimed could be used for new projects.

4. APPLICABILITY OF ARTICLE 55

4.1. Article 55(5)

Article 55(5). "Paragraphs 1 to 4 of this Article shall apply only to operations which are co-financed by the ERDF or Cohesion Fund and the total cost of which exceeds EUR 1 000 000."

The amendment of Article 55(5) of Regulation (EC) No 1083/2006 made by Regulation (EC) No 1341/2008 of 18 December 2008 consists in replacing the provision on proportionate monitoring arrangements for operations whose total cost is below EUR 200 000 by a clear limitation of the application of the provisions of Article 55(1) to (4) to operations co-financed by the ERDF or the Cohesion Fund the total cost of which exceeds EUR 1 000 000²⁰. Operations exempted from the funding gap calculation need to apply sound financial management principles.

For operations co-financed by ERDF or CF that generate income outside the scope of Article 55, the Member States have the responsibility to determine how to treat them, having regard to the principle of sound financial management (Article 14(1) of Regulation (EC) 1083/2006). For example incidental incomes such as sales of material found on a construction site such as stones during a road construction are to be considered under national rules not as project revenue, but as income reducing the investment costs. As the treatment of such income is national responsibility, the Commission will not as a result of its own audits or controls draw conclusions on the treatment given which could lead to financial consequences for the individual operation. However, it may make recommendations to the Member State to better align its practice to the principle of sound financial management.²¹

Managing authorities and beneficiaries should pay a particular attention to the estimation of the total costs of operations. Revisions or increases of costs while an operation is being implemented may cause this operation to rise above the EUR 1 000 000 threshold, in which case Article 55(1) to (4) would become applicable. Therefore, in order to diminish future uncertainty, the Commission would encourage managing authorities to take into account potential variations in their estimation of the total costs and to apply the requirements set out in Article 55(1) to (4) to projects the total cost of which is close to the threshold.

For Member States which have not adopted the euro as their currency, fluctuations of the exchange rate of the national currency against the euro may also cause the operation to rise above the EUR 1 000 000 threshold. The Commission recommends Member States concerned to take exchange rate fluctuations into account in the operation's costs estimates. However, if it wishes to ensure legal certainty, the Member States could decide to consider only the exchange rate in force at the moment of the selection or approval of the project at national level. This will neutralise the risk of cost variations due solely to exchange rate fluctuations.

The amendment of Article 55(5) applies retroactively from 1 August 2006 to all operations receiving assistance from the Structural Funds or the Cohesion Fund under the 2007-2013

²⁰ 'Total costs' is to be understood as the total investment cost within the meaning of Article 55(2), that is to say including eligible and ineligible costs.

²¹ This recommendation does not create an additional legal obligation but incites public authorities to offer only the financial support that is necessary.

programming period with the aim of avoiding two sets of different rules during the same programming period. The Commission will apply the amended provisions for *a posteriori* controls and audits including in its assessment of projects carried out before the entry into force of Regulation (EC) 1341/2008.

In order to ensure equal treatment of all beneficiaries and potential beneficiaries, the impact of the regulatory amendments on contracts or grant agreements already concluded should be reviewed by managing authorities with the view to bringing such contracts and agreements in line with the amendments introduced by Regulation (EC) No 1341/2008. Managing authorities may however decide not to undertake such a review if they wish to keep the more stringent system as it was already applied beforehand. If the managing authority undertakes such a review it should be applied in a coherent manner. Calls for proposals already launched or closed should also be reviewed for this purpose.

Conclusions:

Article 55 is only applied to projects which have total costs above EUR 1 000 000 and are co-financed by the ERDF or the CF.

4.2. Article 55(6)

Article 55(6). "This Article shall not apply to projects subject to the rules on State aid within the meaning of Article 107 of the TFEU."

According to Article 55(6) the requirements laid down by Article 55(1) to Article 55(5) do not apply to operations subject to *State aid rules with the meaning of Article 107 of the TFEU*. This paragraph of Article 55 is in detail explained in information note to the COCOF on Article 55(6) of Regulation (EC) No 1083/2006²².

Attention should be drawn on the fact that the amendments introduced in Article 55 by Regulation (EC) No 1341/2008 and Regulation (EC) No 539/2010 have no impact on the meaning of Article 55(6) and on the projects subject to State aid rules. In this sense for instance, there is no interaction or conflict possible between the thresholds relevant for State aids (e.g. *de minimis rules*) and the one introduced for revenue-generating projects (i.e. EUR 1 000 000 of total costs below which the ERDF and the Cohesion Fund projects are exempted from Article 55(1) to (4) of Regulation (EC) No 1083/2006).

²² Reference of the information note is COCOF 08/0012/02-EN.

Annex I:

Calculation of the Contribution from the Funds: a numerical example

Given their importance, in the next box the three key steps to calculate the funding-gap are summarised, which the Member State may choose to apply for non major projects.

The Three Key Steps to Calculate the contribution from the Funds

First Step: Funding-gap

$$\max DEE = DIC - DNR = FG \quad (2)$$

where : DEE is discounted eligible expenditure;
FG is the funding-gap;
DIC is discounted investment cost;
DNR is discounted net revenue.

Second Step: Discounted Eligible Expenditure:

$$DEE = FG * P \quad (3)$$

where: DEE is discounted eligible expenditure;
P is percentage consistent with the ratio of discounted eligible cost over discounted investment cost.

Third Step: Contribution from the Funds

$$DG_{EU} = DEE * CR_{EU} \quad (4)$$

where: CR_{EU} is the EU co-funding rate
 DG_{EU} stands for discounted contribution from the Funds

This method is useful to determine the contribution from the Funds in discounted values, if a . In order to derive the contribution from the Funds in non-discounted values, each discounted eligible expenditure has to be multiplied by $(1+r)^t$ where r stands for interest rate (recommended value of rate is 5%), and t for the year in which the related eligible expenditure occurs.

Numerical Example

Consider that the discounted investment cost of a project is equal to €100 and discounted net revenue equal to €60 so that the maximum discounted eligible expenditure is equal to €40. Consider, in addition, that the purchase of land needed to realise the project is equal to €24. Since pursuant to Article 7(1)(b) of Regulation (EC) No 1080/2006 the cost of land cannot ordinarily exceed 10% of the eligible expenditure²³, then only (0.1*40=) €4 can be accounted as eligible cost for land and thus €20 will not be eligible cost. Pursuant to Article 55(2), because non-eligible costs are 20% of the discounted investment cost, then we should allocate 20% of net revenue to non-eligible costs and 80% of the net revenue to the eligible cost. This is done by multiplying the funding-gap by that share of the discounted investment costs which is eligible, P, that is,

$$DEE = FG * P = (100 - 60) * 0.8 = 32 \quad (4)$$

where DEE stands for discounted eligible expenditure, that is, the amount of investment cost which multiplied by the EU co-funding rate will identify the discounted contribution from the Funds, that is,

$$DG_{EU} = 32 * 0.75 = 24 \quad (5)$$

from which it is possible to derive the contribution from the Funds in non-discounted values as presented in Annex I.

Assuming that the project has the following cash-flow profile:

Year	Investment costs	Running costs	Revenues	Residual value	Net cash flow	Eligible cost	DEE	UDEE
2007	32,00	-	-	-	- 32,00	25,71	9,14	9,59
2008	25,00	-	-	-	- 25,00	20,09	7,14	7,87
2009	30,00	-	-	-	- 30,00	24,11	8,57	9,92
2010	25,00	-	-	-	- 25,00	20,09	7,14	8,68
2011	-	2,00	8,50	-	6,50	-	-	-
2012	-	2,00	8,50	-	6,50	-	-	-
2013	-	2,00	8,50	-	6,50	-	-	-
2014	-	2,00	8,50	-	6,50	-	-	-
2015	-	2,00	8,50	-	6,50	-	-	-
2016	-	2,00	8,50	-	6,50	-	-	-
2017	-	2,00	8,50	-	6,50	-	-	-
2018	-	2,00	8,50	-	6,50	-	-	-
2019	-	2,00	8,50	-	6,50	-	-	-
2020	-	2,00	8,50	-	6,50	-	-	-
2021	-	2,00	8,50	-	6,50	-	-	-
2022	-	2,00	8,50	-	6,50	-	-	-
2023	-	2,00	8,50	-	6,50	-	-	-
2024	-	2,00	8,50	-	6,50	-	-	-
2025	-	2,00	8,50	-	6,50	-	-	-
2026	-	2,00	8,50	5,00	11,50	-	-	-
Total	112,00	32,00	136,00	5,00		90,00	31,98	36,05
Discounted	99,63	17,83	75,79	1,88	- 39,79	80,06		

²³ Except for exceptional and duly justified cases concerned with operations concerning environmental conservation in case of ERDF.

Where DEE stands for discounted eligible expenditure, UDEE stands for non-discounted eligible expenditure.

Contribution from the Funds in non-discounted value:

$$UG_{EU} = UDEE * CR_{EU} = 36.05 * 0.75 = 27.04$$

where CR_{EU} is the EU co-funding rate;

UG_{EU} stands for non-discounted contribution from the Fund.

It is to be noticed that: (a) in case of the project investment phase being up to one year the approach for calculation of the contribution from the Funds, presented in this note, leads to the same result as the approach presented in the working document n°4; (b) in case of the project investment phase being longer than one year, the results of the two approaches show an insignificant difference. In fact, the approach presented in this note leads to a slightly higher amount of maximum eligible expenditure than the approach of the working document n°4²⁴.

It has to be recalled that for major projects, Managing authorities have to follow the method foreseen in Annex XXI of the Commission Regulation (EC) N°1828/2006 which corresponds to the method presented in the working document n°4.

However, for all other revenue-generating projects, they may choose one of these approaches, both compatible with Article 55(2), for the calculation of the contribution from the Funds, which they consider appropriate.

²⁴ Using the same assumptions as given in the example in section 3.2.2. and the given cash-flow profile, the approach described in the working document n°4 would lead to the contribution from the Funds equal to 26.96, which gives the difference of 0.301% between the two approaches,

Annex II:

Articles 55(2) and 55(3): Classification of Projects in terms of the Possibility to Objectively Estimate Revenue in Advance

The objective of this annex is to provide guidance for the implementation of Article 55(3) as regards the identification of revenue which cannot be estimated and, by extension, the identification of revenue which can be estimated as referred to in Article 55(2).

To this end, this annex will first focus on factors affecting the possibility of estimating revenue in advance and will then deal with a synoptic classification of revenue sources according to their ability to be objectively estimated in advance along with the factors affecting that exercise.

In order to apply the funding-gap method, it is necessary to forecast the cost-revenue stream over the project time horizon. In this regard, it is worth recalling that revenue is the product of two elements: (a) charges/rents/payments (hereafter "tariffs"); (b) number of users and/or quantity of the good/services provided by the project.

Tariffs are determined by policy choices and depend on: current policies (e.g. tariffs for waste treatment charged to users, or tolls on highways); the expected changes in the regulatory framework (for example, the application of the polluter-pays principle may modify the tariffs charged). The number of users depends on all factors affecting demand for the good/service provided by the investment project at stake. In order to clarify factors affecting demand this Guidance note in annex II will consider examples where revenue can be estimated in advance (e.g. transport and waste treatments) and where revenue cannot be estimated in advance (e.g. RTD projects).

Examples of projects where revenue can be estimated in advance

▪ *Transport*

The following factors need to be taken into account:

- a. the socio-economic characteristics of the area;
- b. the journey generated by the same area;
- c. the journey distribution to different locations;
- d. the assignment;
- e. comparison of results with actual traffic data.

Demand analysis has to include:

1. current demand: this is the base-year traffic data arising from the five factors above, considering the current state of the relevant transport infrastructure;
2. induced demand: this is the base-year traffic allowing for all relevant infrastructure changes due to the project in terms of journey generation, journey distribution, modal split and assignment;
3. forecast demand: this is the traffic data including macroeconomic and sector forecasts and elasticity estimates of transport demand to generalised cost²⁵ and income.

²⁵ The generalised cost of transport is the sum of monetary (e.g. ticket for train) and non-monetary (value of time) costs.

▪ ***Waste Treatment***

The following factors need to be considered to derive demand for waste treatment:

- a. main agglomerations producing the waste to be treated described in terms of population, demographic trends, and migratory flows;
 - b. main productive activities producing the waste to be treated along with their expected growth;
 - c. habits and possible habit evolutions such as recycling;
 - d. potential new technologies affecting the quantity and type of waste to be treated.
1. Demand analysis has to include: current demand, that is, the present demand given not only the quantity and type of waste produced but also the existing infrastructure;
 2. induced demand, that is, demand arising from new users: the new infrastructure may serve a larger area;
 3. forecast demand due to foreseeable changes resulting from the four factors above and to foreseeable changes in the regulatory framework.

Example of projects where revenue objectively cannot be estimated in advance

▪ ***Research, Technological Development, Innovation***

In contrast to the former examples, revenue objectively cannot be estimated in advance for some projects, whose key feature is that of innovation, so that demand cannot be inferred as it is supply generated demand, (i.e. it is the innovation itself which creates the demand). In other words, given the lack of data and past experience, estimates can be formulated but they will be highly subjective. Examples of such projects can be found in the priorities set out in Article 4(1) of Regulation (EC) No 1080/2006 (e.g., research institutions and research and technology centres).

Article 55(2) provides that:

"Eligible expenditure on revenue-generating projects shall not exceed the current value of the investment cost less the current value of the net revenue from the investment over a specific reference period for:

(a) investments in infrastructure; or

(b) other projects where it is possible to objectively estimate the revenues in advance."

Article 55(3) as amended by Regulation (EC) No XX provides that:

"Where it is objectively not possible to estimate the revenue in advance, the net revenue generated within five years of the completion of an operation shall be deducted from the expenditure declared to the Commission."

Therefore, Article 55(2) and Article 55(3) classify projects on the basis of whether revenue can be estimated in advance. As shown above, whether a project's revenue can be estimated in advance is determined by factors on which tariffs and demand are dependent. This indicative classification is synoptically presented in the following Table.

Table: Classification of revenue in terms of their possibility to be estimated in advance and related factors

Possibility of Revenue Estimation	Tariffs	Estimated Demand
Revenue Estimation Objectively Possible in Advance (Article 55(2))	Clearly Stated Policy Choice Foreseeable Policy	Models and Data Available Expert opinions based on models and data
Revenue Estimation Objectively not Possible in Advance (Article 55(3)).	Lack of data. New demand generated by supply.	Lack of data. Expert opinion highly subjective

Conclusions. The identification of projects whose revenue can or cannot be estimated in advance depends on a number of factors affecting the possibility of forecasting the revenue key determinants: tariffs and demand. In this annex the key elements needed to forecast tariffs and demand have been identified. As it emerges from the Table above, the most important of these factors are the availability of consistent data and previous experience with similar investment projects.