UNITED NATIONS
SUSTAINABLE
DEVELOPMENT
GROUP

UNSDG Efficiency Reporting Methodology

Methodology for calculating efficiencies

1. Overview

This document aims to:

1. Establish a standard methodology to be applied to the calculation of efficiencies included in the cross-UN Efficiency Report in the following categories: Administration, Finance, HR, ICT, Logistics and Procurement.
2. Provide guidance and tips on approaches to efficiency calculation for entities without a clear methodology. For entities with an existing methodology in place, please continue to calculate efficiencies using your entity approach – assuming this approach is in line with general principles set out in Part 1 below
3. Provide details of resources you can use to develop an agency methodology

The document is specifically focused on the calculation of efficiencies from the following:

- Efficiencies from bilateral initiatives (reported by agency receiving the services)
- Efficiencies from agency initiatives

Note that the methodology for calculation of inter-agency initiatives (i.e. BOS, CP, LSSC/CBO) will be detailed in the respective reporting platforms managed by UNDCO.

PART ONE – A STANDARD APPROACH

2. Types of efficiencies

There are 3 types of efficiencies to be included in the cross-UN Efficiency report. Efficiencies reported will need to achieve at least one of these and could result in all three.

- Cost savings– reducing the level of financial resources disbursed to achieve a given outcome. This could reduce current spending and/or avert potential future price increases. This is calculated in US$ and can be further broken down into:
    - Cost reduction – a reduction of an existing cost
    - Cost avoidance – a reduction of an expected future cost
- Time savings – reducing the overall effort to achieve a given task. This is firstly calculated in reduced time (hours/days) and then converted into a US$ equivalent.
- Effectiveness improvements – initiatives that result in a qualitative improvement – for example a reduced risk, or better quality of service.

3. Estimated and realized efficiencies

The report includes details of both efficiency estimates and realized efficiencies (actuals). The report will always distinguish between the two types.

All types of efficiencies as defined in section 2 can be both estimated and realized. It is clearly important that efficiencies are calculated to give a high degree of confidence in their accuracy. The nature of the efficiency may not enable 100% accuracy – assumptions may need to be made, and data extrapolated.

The estimate would be reported before the efficiency is realized, and the realized efficiencies after. A detailed re-assessment of the estimated efficiency may never be made – in which case the efficiencies reported would remain as estimates.

4. Time horizons

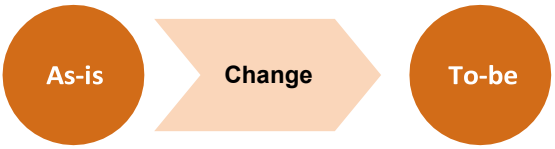
Any initiatives started on or after 1st January 2019 should be included. Efficiencies resulting from initiatives prior to this date should not be included with the exception of Global Shared Services for which data on efficiencies arising from initiatives from 2015 may be reported[1].

Initiatives that result in efficiencies on an ongoing basis should be reported up to a maximum of 10 years.

5. General methodology

All efficiencies related to a specific project or change initiative rely on a comparison of two states of the organization:

- The "as-is" or prior state: situation before implementation of the change initiative.
- The "to-be" or current state: situation after implementation of the change initiative.



As a fundamental principle of benefits calculation, as-is and to-be states must always be clearly defined and analyzed separately. Figures derived from the analysis of both may then be compared to estimate benefits.

Step-by-step benefits assessment

1. *Before implementation*:
    1.1. Determine **scope**: posts, processes, etc. that are impacted by the change initiative.
    1.2. Document the organizational set-up targeted by the change initiative (**as-is state**).
    1.3. Obtain corresponding cost information (**baseline** costs).
    1.4. Document the future organizational set-up (**to-be state**).
    1.5. Estimate corresponding cost information (**estimated costs**).
    1.6. Obtain **expected benefits**: compare estimated costs (1.5) to baseline costs (1.3).
2. *After implementation*:
    2.1. Ensure documentation of the to-be state matches actual post-implementation set-up.
    2.2. Obtain corresponding cost information (**actual costs**).
    2.3. Obtain **actual benefits**: compare actual costs (2.2) to baseline costs (1.3).
    2.4. Assess **forecast accuracy**: compare actual benefits (2.3) to expected benefits (1.6).

[1] The different treatment for Global Shared Services recognizes the significant investment required to initiate a GSS and that such initiatives are usually a 'one-off' per agency (e.g. creation of a service center or digital platform). Failure to report on efficiencies arising from these GSS initiatives as they progressively expand in application and use would result in underreporting on efficiencies arising from this important pillar of UN reform.

PART TWO – GUIDANCE AND TIPS ON CALCULATION (ADVISORY ONLY)

If you are already have a methodology in place in your agency, please continue to use it. If you do not have an existing methodology this guidance will give you some ideas as well as considerations to be aware of. Agencies are encouraged to secure the engagement and support of their respective Comptroller in the calculation and reporting of efficiencies and to ensure alignment across system-wide and agency specific reporting.

6. Calculation method for direct cost reduction and cost avoidance

Cost savings mainly result from:

- Direct cost reduction – i.e. impacts that reduce the cost base that are either One-offs, or Ongoing. An example here could be a re-negotiated contract for international travel resulting in a reduction of flight costs, or the transfer of a function from a high to a low cost location.
- Cost avoidance - a measure taken now to avoid a future cost – these should be reported against the year when the cost would have occurred. An example here could be avoided process costs due to reduction of time spent on a tender due to a collaborative procurement exercise, or a renegotiation of a contract ahead of an expected price increase.

Such costs could include:

- *Material costs*: costs related to contractual arrangements such as consultancy contracts, purchase of consumables, etc. Note that this category includes both goods and services.
- *Overhead costs*: costs only indirectly related to a given cost driver. In the case of staff costs (with headcount being the cost driver), overhead costs would consist in a share of office space rental, office equipment, etc.
- *Staff costs*: reduction in costs of staff due to transfer of a function from a high to low cost location, or reduction in overall staffing levels. See the section below on 'Which costs to use' for more information about how to calculate.

The basic principles explained under "General methodology" apply, i.e. documentation of distinct as-is and to-be states, and comparison of corresponding costs both before implementation (baseline costs, expected benefits) and after implementation (actual benefits, forecast accuracy).

7. Calculation method for time savings

Time savings generally result from reducing the amount of work required to execute a given process, for example by providing more powerful or user-friendlier tools to workers or by removing redundant or low-added-value process steps (e.g., through automation).

Estimating monetary benefits in this case relies on the general methodology of comparing costs before the change (as-is) and after the change (to-be).

By its nature the calculation for time savings is a more complex one. Where savings from staff time do not result in a reduction of staffing levels (which will be calculated as the cost of the positions reduced), and where savings in staff time are re-purposed to other activities, there are a number of factors to take into consideration:

1. Which costs to use to quantify time savings?
2. How to calculate savings where these results from less than 1 full time equivalent (FTE) of staff time

Which costs to use?

We suggest that the costs you use in your efficiency calculation mirror the costs you use in budgeting. Most organizations calculate standard costs as part of the budgeting process. If your organization has standard costs, then this will be a good basis for your calculation. The granularity of these costs will be determined by your entity – these may go down to grade level/contract type/duty station.

Standard costs can also be used to calculate costs reductions from transfer of work from a high cost to a low cost location, or for calculating reductions in staffing. For example if a function is transferred from a P3 in New York to a GS6 in Manila, there will be obviously be a large differential of cost.

How to calculate portions of time?

Where the time saved represents less than a full FTE (full time equivalent of one staff member at a particular grade) you will need to determine the FTE equivalent. In order to do this, you will need to factor in actual working hours/days.

Example
Situation: UNABC saved 600 hours of time annually of a GS6 in Geneva from eliminating unnecessary steps from the recruitment process
Calculation:
1. Use the standard cost for a GS6 in Geneva
2. Convert 800 hours into FTE. Note that no-one works 5 days/week for 52 weeks. You need to adjust for annual leave, public holidays, estimated sick leave, training time etc. Typically, this will leave you with around 200-220 days of actual productive time.
In this example and assuming you have an 8-hour working day – 800/8 = 100 working days.
100 working days/200 working days = 0.5 FTE

8. Calculating time savings across multiple offices

Time savings that occur across multiple offices may be hard to calculate – particularly where the initiative results in savings in for example all field offices. It would be time consuming to do an analysis of savings in each location.

For these benefits calculations, the main challenge in assigning a monetary value to time savings lies in the multiplicity of office locations:

- *Process differences*: while achieving the same result, processes may differ between locations (e.g., extra steps, different processing times, different grades of involved staff).
- *Cost difference*: standard costs reflect differences in prevailing local cost-of-living and job market conditions, and therefore present significant differences depending on location.

Possible approaches

Where the change is expected to be low value, then performing an extensive exercise to estimate time savings may not be effective. Another approach may be to utilize the Universal Price List (UPL) or Local Price List (LPL) developed by UNDP.

Accounting for significant differences in time requires an analysis of the change in time across a representative sample of offices from different regions and typologies. For example, if the change impacted all offices you could include a sample of the following types of offices:

- Country offices of different typologies
- Regional offices
- HQ divisions

Based on analysis results, a representation of the "average" office can be built, either for each typology or across the board if differences between typologies are limited.

Such an analysis involving multiple offices is a heavy undertaking and is only worthwhile when the expected annual benefits are comparatively large. The general process for office set-up analysis therefore allows to skip it when this is not the case:

1. Conduct preliminary analysis based on estimated office set-ups. – see general methodology section above
2. If the preliminary analysis shows annual benefits **of a low value, it may not be worth to conduct a detailed analysis –**Skip to step 5 below.
3. If the preliminary analysis shows significant annual benefits plan for a full-fledged analysis with office involvement as described above.
4. Conduct full-fledged analysis.
5. Submit raw data and analysis results to Regional Chiefs of Operations (for regions included in the sample) and/or Chief of Operations (for Headquarter Offices included in the sample) for their endorsement.
6. Once endorsed, analysis results can be used for publication or further use.

Office staff time costing

Once offices' as-is and to-be states are documented, a monetary value needs to be assigned to differences in the number of positions or processing times.

Because standard costs are different in each country, an accurate estimate would require calculating costs individually for each office worldwide. In most cases, however, using "average standard costs" is sufficient as high accuracy is usually unnecessary.

- *World average*: you could calculate a world average standard costs based on standard costs tables for all countries weighted by headcounts.

Annex 1

Process simplification example

Consider a hypothetical invoice validation process in Division X that requires 20 minutes per invoice, with a volume of 4,000 invoice per month. The process is carried out by staff at the GS05 level, for which the standard costs table for the division provides an average annual cost of USD 24,509.

The process can be improved by eliminating redundant steps, shaving 2 minutes off the processing of each invoice. With this, all necessary information for benefits calculation is available:

Calculation step	**Calculation**	**Result**
Total as-is workload	4,000 invoices x 20 minutes x 12 month	960,000 minutes
As-is FTEs[1]	960,000 minutes / (218 workdays per year x 8 work hours per workday x 60 minutes)	9.19 FTEs
Yearly as-is cost	9.19 FTEs x USD 24,509	USD 225,148
Total to-be workload	4,000 invoices x 18 minutes x 12 months	864,000 minutes
To-be FTEs	864,000 minutes / (218 workdays per year x 8 work hours per work day x 60 minutes)	8.27 FTEs
Yearly to-be cost	8.27 FTEs x USD 24,509	USD 202,633
Annual benefit	USD 225,148 – USD 202,633	**USD 22,515**

Annex 2

Relocation example

Consider a hypothetical unit located in New York with staffing as in the table below. Assuming that relocating this unit to Budapest would not require any change in staffing, corresponding benefits can be calculated based on standard costs for New York and Budapest:

Staff grade	New York standard costs	Budapest standard costs	Number of staff	New York total costs	Budapest total costs	Benefits
PR04	221,557	165,960	1	221,557	165,960	55,597
PR03	186,180	139,462	2	372,360	278,924	93,436
GS06	107,349	29,033	2	214,698	58,066	156,632
GS05	97,111	24,509	6	582,666	147,054	435,612
		Total:	11	1,391,281	650,004	**741,277**

The benefits of relocating this hypothetical unit from New York to Budapest would amount to **USD 741,277** for 2018.