Topic 1: Percentage/Share of Rural Population Benefiting from New/Improved Services/Infrastructures (2014-2020)

Working Package 1

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'Ex post evaluation of RDPs 2014-2020: Learning from practice'

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The Evaluation Helpdesk is responsible for the evaluation function within the European Network for Rural Development (ENRD) by providing guidance on the evaluation of RDPs and policies falling under the remit and guidance of DG AGRI's Unit C.4 'Monitoring and Evaluation' of the European Commission (EC). In order to improve the evaluation of EU rural development policy the Evaluation Helpdesk supports all evaluation stakeholders, in particular DG AGRI, national authorities, RDP managing authorities and evaluators, through the development and dissemination of appropriate methodologies and tools; the collection and exchange of good practices; capacity building, and communicating with network members on evaluation related topics.

Additional information about the activities of European Evaluation Helpdesk for Rural Development is available on the Internet through the Europa server (http://enrd.ec.europa.eu).

CONTENT

INTRODUCTION

This document has been developed as a part of the Working Package 1 of the Thematic Working Group 8, 'Ex post evaluation of RDPs 2014-2020: Learning from practice', which analyses the emerging evaluation issues in relation to the assessment of RDP effects on achieving a balanced territorial development of rural economies and communities. This document specifically highlights issues related to the use of the common result/target indicator 'Percentage of rural population benefiting from new or improved services/infrastructures (ICT)' to measure the achievements under the Focus Areas (FA) 6B (Result/Target Indicators R23/T22) and 6C (Result/Target Indicators R25/T24) in the 2014-2020 programming period.

This is **a non-binding document**, which aims to support Member States to exchange and learn from current practices of assessing RDP impacts related to the CAP objective, 'balanced territorial development of rural economies and communities'. Additionally, this document should serve the purpose of supporting the needs of evaluation stakeholders in improving the quality of evaluations when preparing for the ex post evaluation of RDPs 2014-2020.

PERCENTAGE OF RURAL POPULATION BENEFITING FROM NEW OR IMPROVED SERVICES/INFRASTRUCTURES (ICT): CONCEPT AND PRACTICAL APPLICATION OF THE RESULT/TARGET INDICATORS R23/T22 AND R25/T24 IN THE CMES IN 2014-2020

1. Context

I. 'Percentage of rural population benefiting from new or improved services/infrastructures' is used as a common result/target indicator to measure achievements under Focus Areas 6B (Result/Target Indicator R23/T22) and 6C (Result/Target Indicator R25/T24) in the 2014-2020 programming period.

II. Relevant guidance to support Member States in the assessment of 2014-2020 RDPs results, achievements and impacts have been prepared by the European Commission and the European Evaluation Helpdesk:

Technical support document	Relevant parts, sections
For monitoring: Target indicator fiches for Pillar II (Priorities 1 – 6)	Fiches for result/target indicators R23/T22 and R25/T24
For evaluation: Assessment of RDP Results: How to Prepare for Reporting on Evaluation in 2017	Annex 11 – Fiches for answering CEQs 17 and 18

III. Reporting on quantified values for R23/T22 and R25/T24 in 2019 has in some cases raised questions concerning data quality. Despite a still very low level of implementation, some target values for R23/T22 (FA 6B) have already been significantly exceeded by the end of 2018 and less for R25/T24 (FA 6C).

2. Experts' conclusions

I. **The attribution of the RDP measures contributing to R23/T22 and R25/T24 did not pose any problem in the Member States.** The primarily contributing measures are precisely defined in the indicator fiches[1]. The related measures and FAs have been frequently programmed in the RDPs and consequently the indicators are often reported. R23/T22 (FA 6B) is relevant for almost all RDPs and R25/T24 (FA 6C) for less than half of the RDPs.[2]

II. **The indicator fiches' described methodology/formula to calculate R23/T22 and R25/T24 has been applied in different way depending on the Member State**. This is mainly due to differences in the operationalisation of the term 'potential users' in the RDPs. In some RDPs a more narrow definition of potential users is applied depending on the specific target groups of certain types of projects, while in other Member States they apply a broader approach for monitoring purposes and count the total population of the relevant administrative unit where the service/infrastructure is placed (hereafter: total population approach versus target group specific approach).

III. **Calculating the potential users by counting the total population of the administrative unit where the service/infrastructure is located can be automatable and simplifies the monitoring process, but can potentially lead to a high overestimation of the population benefitting, even if double-counting is avoided.** The approach works better for general services and infrastructures but is less accurate for interventions with more specific target groups. As a basis for evaluation the data provided with this approach may be less useful and require more additional surveys and data collection by the evaluator.

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[1] For R23/T22 the Measures 7.1, 7.2, 7.4 to 7.8 excluding ICT/Broadband and for R25/T24 Measure 7.3.
[2] Source: Screening of AIRs 2019, European Evaluation Helpdesk for Rural Development.

IV.   **Using a narrower definition of 'potential users' for calculating the population indicator for specific interventions (i.e. target group specific approach) can lead to more realistic numbers compared to counting the whole administrative unit**. While this may be more demanding in terms of the administrative efforts, the evidence shows that there are many projects within M 07 sub-measures for which the population benefiting indicators are well suited as a selection criterion (e.g. for project types where it can be technically checked). Therefore, this approach can be further justified. (See examples in Annex 1, Box 1 and 2)

V.   **Evaluation is used to further check more qualitative aspects of the population benefiting,** such as, who is actually using the infrastructure/service, the frequency and the quality. These aspects are often potentially of higher interest to evaluation stakeholders than the pure quantitative reach.

Table 1. Comparison between approaches to define, monitor and assess indicators R23/T22 and R25/T24

	Total population approach	Target group specific approach
Potential users defined as	The whole population of the administrative unit in which the project is located	Direct beneficiaries (target group) of specific interventions or types of projects
Differentiation	By intervention	• By project type • By target group
Avoidance of double counting	Yes, via unique identifier	Yes, via specific target groups (In the case of projects serving the whole community, the total population is counted only once)
Strengths	• Simple and automatable • Easy to verify with official statistics	• Provides more accurate numbers • Can be linked to the planning stage of applications (useful for policy steering and evaluation) • Good basis for evaluation (e.g. for applying counterfactual approach)
Weakness	• Potentially high overestimation • Numbers are less useful for policy steering and evaluation	• Higher administrative burden • Difficult to verify

3. Issues and possible solutions for the ex post evaluation of RDPs 2014-2020

A number of practical and methodological issues concerning the application, counting and aggregation of the related common result/target indicators have been identified from the analysis of the evaluation sections of the Annual Implementation Reports (AIRs) in 2019, from feedback of evaluation stakeholders in Yearly Capacity Building Events, from a dedicated Focus Group on 28/04/2020 and from complementary interviews in the Member States. The identified issues and possible solutions are described along the workflow of setting-up, monitoring and assessing R23/T22 and R25/T24.

Issue 1: Unspecific definition of a 'potential user' in the RDP context

Solution: To operationalise the 'potential user' more precisely for different types of projects/target groups in the RDP context

When further narrowing down the `potential user` in the RDP context, it should be kept in mind, that the indicator fiches' methodology/formula (Ratio a/b in %) does not define the 'potential users' exclusively as municipalities and group of municipalities, but can also refer to the specific target groups (e.g. women, farmers) or types of projects. Hence, the list of examples given in the a-part of the formula in the indicator fiche are not exhaustive. Further defining in a more precise way the 'potential user' makes the numbers more meaningful than simply counting the total population of the administrative unit in which an intervention takes place. When using further categorisations of the 'potential users' per eligible activity it is however helpful to respect the demographic structure used by Eurostat (in terms of gender, age group, etc.).

> **See examples in Annex 1: Box 1 and Box 2**

Issue 2: Understanding of population benefiting in the case of R23/T22

Solution: Capture population benefiting from both new and improved services/infrastructures

While the current indicator fiche for R23/T22 refers only to population benefiting from 'improved services/infrastructures', in practice, the population benefiting from new services/infrastructures should also be counted under this indicator.

Issue 3: Outdated and non-validated indicator values reported

Solution: Verifying the population benefiting

The number of people benefiting can be verified on completion of the operation. This is an opportunity to amend the number, if necessary. After completion of the operation, the number can be verified in order to see if it has been correctly calculated and if there has been any change in the target group that should still be considered in the reported number.

Issue 4: Double counting of the same population if different operations are supported in the same area

Solution: Avoidance of double counting

Specifying and counting the potential users for different types of projects/target groups helps to avoid overlaps between the counted population benefitting of different interventions in the same administrative unit. Generally, such overlaps between potential users in the same administrative unit are expected to be minor in the case of specific target groups and can be addressed and recorded. However, in cases where in the same administrative unit a project providing benefits to the whole community is implemented in addition to projects for specific target groups, the total population of the administrative unit should be counted only once.

It should also be noted, that indicator O.15 cannot be reported as a substitute for the result indicator, as this would be double counting.

Issue 5: Mistakes during aggregation and calculation of indicator ratio

Solution: Calculating the indicator ratio at the programme level

While the indicator fiches do not explicitly define at what level the indicator ratio is to be calculated, in practical terms, it is recommended that the numerator values are aggregated from the operations and then the ratio can be calculated at the programme level. This approach provides a less error-prone way of calculation, than calculating the ratio at the operations level first.

Issue 6: Mistakes in the reference year of the numerator and denominator

Solution: Using the right reference point

The reference point for the indicators' numerator is the end of the previous monitoring year, whereas, for the denominator it is the rural population as defined in the RDP at the beginning of the implementation period with the Common Context Indicator 1 (Total Population minus Population urban).

Issue 7: Use of R23/T22 and R25/T24 in RDP evaluations

Solution: Further verification of the indicator values during the ex post evaluation and an in-depth analysis of different types of services

The indicators should be meaningfully used as a basis for evaluation. For this purpose, the evaluator may look at the methodology used to define and collect the 'potential users' in the RDP and if assessed reliably, use the collected numbers as a basis for further qualitative assessments (e.g. survey to explore actual users and quality of infrastructures/services).

Table 2. Summary table - issues and solutions for the ex post evaluation related to R23/T22 and R25/T24

Working Step	Identified issues leading to bad reporting	Possible solution	
1) Operationalising the indicator fiches for R23/T22 and R25/T24 in the RDP context	Unspecific definition of a 'potential user' in the RDP context	a)	To operationalise the 'potential user' more precisely for different types of projects/target groups in the RDP context helps to make the calculated values more meaningful for project steering and evaluation.
2) Estimating the number of potential beneficiaries during the application phase	Understanding of population benefiting in the case of R23/T22	b)	Capture population benefiting from both new and improved services/infrastructures.
3) Adjusting the numbers if necessary, during project completion	Outdated and non-validated indicator values reported	c)	Verifying the total population benefiting on the completion of the operation, if necessary, can be used to check the calculation and also if any changes in the targeted group are still to be considered.
4) Aggregating and reporting indicator numbers	Double counting of the same population if different operations are supported in the same area	d)	Avoidance of double counting. Specifying and counting potential users specifically for different types of projects/target groups helps to avoid overlaps between different projects in the same administrative unit. If projects in the same area are implemented that serve the whole community, the population should be counted only once.
	Mistakes during aggregation and calculation of indicator ratio	e)	Aggregation of only the numerator and calculation of the indicator ratio at the programme level, rather than at the operations level with a view to avoid errors.
	Mistakes in the reference year of the numerator and denominator	f)	The end of the previous monitoring year should be used as the time reference for the numerator, whereas the rural population as defined in the RDP at the beginning of the implementation period with the Common Context Indicator 1 (Total Population minus Population urban) should be used for the denominator.
5) Use of indicator in the evaluation	Use of R23/T22 and R25/T24 in RDP evaluations	g)	Further verification of the indicator values during the ex post evaluation and an in-depth analysis of different types of services.

ANNEX 1: APPLICATION AND PRACTICAL EXAMPLES FROM THE MEMBER STATES

1. Application in the Member States

1.1. Relevance and use of R23/T22 and R25/T24

R23/T22 (FA 6B) is relevant for almost all RDPs, R25/T24 (FA 6C) for less than half.[3]

- 98% of RDPs programmed the Focus Area 6B (Fostering local development in rural areas). R23/T22 covers a bigger number of M07 sub-measures and more types of infrastructure/service-related projects under FA 6B.

- 48% of RDPs programmed the Focus Area 6C (enhancing the accessibility, use and quality of Information and Communication Technologies (ICT) in rural areas). R25/T24 covers Sub-measure 7.3 supporting ICT only.

In Focus Area 6B, under which basic services and village renewal is supported, the EU target is to benefit 23% of the rural population with improved services (around 30 million people)[4].

In Focus Area 6C which supports broadband infrastructure, including its creation, improvement, expansion, and provision of access to broadband and public e-government solutions, the EU target is to benefit **14% of the rural population** from new or improved ICT services and infrastructure (around 18 million people).

1.2. Reporting in the AIRs submitted in 2019

Statistical outliers among reported values

It is noticeable that for R23/T22 (FA 6B), despite the low level of implementation, many target values have already been significantly exceeded by the end of 2018. This is an indication that the indicator, if used without data clearance, is of less use for programme steering. Concerning R25/T24 (FA 6C) the achievement of the targets is still relatively low.

Due to the often-inaccurate approaches taken in the Member States to the calculation of both indicators, it is very difficult to verify the correctness of the reported figures on the achievement of targets. For example, in Austria, the target value for T22 was 54.46% of the population in rural and intermediate regions. By the end of 2018, 82.21% of the population in Austria had already been reached, with a still very low level of implementation, which leads to a target achievement rate of 150.97%.[5]

R23/T22 is likely to be very sensitive to the reporting of highly biased figures, which cannot be verified ex post at the EU level. The sometimes-oversimplified calculation methods in Member States may contribute to this.

Oversimplified calculation methods have been frequently applied

Programme authorities often count the total population of the community where the project beneficiary is located, even if the operation involves none or only a small part of that population. Often, it is unclear whether the avoidance of double counting, as requested by the indicator fiche, is followed or not.

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[3] Source: Screening of AIRs 2019, European Evaluation Helpdesk for Rural Development.
[4] Source: ENRD, Priority & Focus Area Summaries: Rural Development Programmes 2014-2020: Key facts & figures, FOCUS AREA 6B, 6C https://enrd.ec.europa.eu/sites/enrd/files/focus-area-summary_6b.pdf; https://enrd.ec.europa.eu/sites/enrd/files/focus-area-summary_6c.pdf
[5] Source: Annual Implementation Report submitted in 2019 by the Austrian RDP 2014-2020

Aggregation of achievements at the EU level remains challenging

Showing aggregated figures on R23/T22 and R25/T24 is not straightforward due to the above mentioned data consistency issues.[6]

2. Examples

A wide spectrum of sub-measures are implemented under M07 (Article 20[7]) as reported in the AIR submitted in 2019. According to the Helpdesk screening of the AIR submitted in 2019, RDPs contributed to the development of a broad variety of services and local infrastructures in rural areas:

- **Accessibility and mobility** (e.g. roads are built to reach remote and marginalised agricultural and forestry holdings or to access natural heritage and cultural sites).
- **Village renewal** (e.g. facilities for recreation, culture, sport, and leisure in rural areas, improvement of water supply and waste management/cleaning, renovation of water and sewage infrastructure**,** investments in energy efficiency and renewable energy).
- **Provision of social and health services** (day care centres for elderly, refugee houses, facilities for children and adolescents).
- **Broadband expansion and better use of ICT** (expansion of broadband mainly in areas where telecommunication companies are not interested to intervene, purchasing ICT devices).

The following boxes show some examples of interventions where the indicator is well suited (also as a selection criterion) and potentially leads to more reliable indicator values in practice.

R23/T22 is applicable for some projects in the context of **village renewal**, if the size of the population involved is a criterion for the assessment of a project. The more community citizens are directly affected by the project, the greater the benefit for the community/village. Therefore, projects that affect the entire community population or a significant part of it are scored higher.

R23/T22 is also a common selection criterion for **social services** when it comes to accessibility. Answering the question, 'Does the project make a real contribution to improving access to the supply of social services for the rural population?'

In the following example in Austria, the number of potential beneficiaries is put in relation to the relevant overall target population (e.g. elderly person in the municipality or in the district):

- > 10% of the respective target group reached (10 points);
- 5% - 10% of the respective target group reached (6 points);
- < 5% of the respective target group reached (2 points).

The figures for the corresponding target group (e.g. people in need of care) can usually be easily provided by the project applicant because they provide a mandatory planning basis for a facility. A feasibility study at the beginning of the project when designing a service is available in most cases.

Table 3. Example from Austria: provision of detailed data for R23/T22 at the operations level

Project	Population in the reference area	Benefiting population in absolute numbers	Share of benefiting population (rounded up)*	Reference area (rural area without towns)
Child and Adolescent Psychiatry Rankweil (Herz-Jesu-Heim)	67,779	678	1%	Vorarlberg (without Dornbirn and Feldkirch
Senior Day Care Werfen	2,890	578	20%	Pfarrwerfen
Senior Mobile Pair	3,450	490	14%	Fuschl am See

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[6] Staff Working Document (2019) 445 final
[7] Article 20 of Regulation (EU) 1305/2013.

Project	Population in the reference area	Benefiting population in absolute numbers	Share of benefiting population (rounded up)*	Reference area (rural area without towns)
'aks gesundheit GmbH' - Conversion of a social psychiatric care home	309,043	24,723	8%	Vorarlberg (without Dornbirn and Feldkirch)
Day Clinic Child and Adolescent Psychiatry (Marianum Bregenz)	67,779	678	1%	Vorarlberg (without Dornbirn and Feldkirch
Refugee House St. Anton	4,637	70	1%	Bruck an der Großglocknerstraße
Purchase of two minibuses for the transport of young people with disabilities	1,008	94	9%	Oberalm
Red Cross Vorarlberg - Purchase of transport vehicles II	309,043	350	0.1%	Vorarlberg (without Dornbind and Feldkirch
Total	**321,850**	**27,661**		

* the % of the respective target group reached is calculated only for the purpose of the selection criterion

Source: Isabel Naylon, Ingrid Machold (2019), Evaluation VHA 7.4.1 Soziale Angelegenheiten (SPB 6b)

The indicator is also suitable in the field of **broadband expansion**, as the aim is to achieve better geographical coverage of households with a certain connection quality (increasing availability based on residences).

In the areas of **technology and transport infrastructure**, it is necessary to consider very carefully, which project types the indicator is applicable and how the beneficiary population is defined, as the following examples show.

Box 1. Example of potential users defined for specific types of projects (Austria)
In the types of operations 7.2.3 Supports for climate friendly and environmentally friendly technologies in the climate and energy model regions, only the project types with photovoltaic systems feeding directly into the public electricity grid allow the population to benefit directly and are therefore <u>considered</u>. For the selected project types the respective municipal area is used as a uniform reference area. Double counting is avoided by counting the resident population only once even if there are several projects implemented per municipality.   Site related projects with an exclusive effect on the respective property, such as, solar plants, single biomass systems or model refurbishments for energy efficiency are <u>not considered</u>, even if they are part of the communal climate strategy. Without feeding into the public electricity grid, such plants create benefits only for the immediate locations and their employees rather than for the entire population of the community. The indicator is therefore set at zero.

Source: Mecca/ Hannes Schaffer, Stefan Plha (2019), Evaluation Vorhabensart 7.2.3. Umsetzung von Klima- und Energieprojekten auf lokaler Ebene (6B)

Box 2. Example of potential users defined for specific target groups (Austria)
In the type of operation 7.2.1 Rural transport infrastructure (M07, FA 6B) 204 projects in 160 municipalities with 482,577 inhabitants were completed by the end of 2018. The number of interested parties or beneficiaries (of cooperatives, contribution societies, etc.) of the road projects results in a total of 2,746. This is in the narrower sense the group of beneficiaries that should be used for R23/T22 and not the 482,577 inhabitants of the respective administrative units.   In order to further assess the impacts in the future and, additionally to the number of interested parties/beneficiaries the following indicators could be collected: • building length in metres,   • accessed area in hectares,   • number of accessed agricultural and forestry farms,   • number of accessed non-agricultural businesses,   • number of other accessed residences.

Source: Oliver Tamme (2019), Evaluation VHA 7.2.1. Ländliche Verkehrsinfrastruktur (6B)

ANNEX 2: INDICATOR DEFINITIONS

1. Common Monitoring and Evaluation System

The following table summarises the current definition of result/target indicators R23/T22 and R25/T24 based on the CMES. [8]

Table 4.   Definition and use of result/target indicators R23/T22 and R25/T24 in the 2014-2020 programming period

CMES indicator name	Percentage of rural population benefiting from improved services/infrastructures	Percentage of rural population benefiting from new or improved services/infrastructures (ICT)
Indicator code	R23/T22 (P6 / FA 6B)	R25/T24 (P6 / FA 6C)
Definition, Unit of measurement	% of rural population benefiting from improved services/infrastructures supported under RDP	% of rural population benefiting from support for services/infrastructure (broadband internet infrastructure and other ICT)
Breakdown of indicator	• no	• no
Measures with primary contribution to the indicator (when programmed under the FA)	• Measure 7 (Article 20) 'Basic services and village renewal in rural areas' (only 7.1, 7.2, 7.4 to 7.8 excluding ICT/Broadband)	• Measure 7.3 (Article 20) 'Basic services and village renewal in rural areas (ICT/Broadband)'
Methodology	Ratio a/b in % • a) The definition of the benefiting population is the potential users: size of the population in the area (e.g. municipality, group of municipalities…) benefiting from the service/infrastructure. • b) Total rural population covered in the RDP area Double counting of the same population should be avoided. If different operations are supported in the same area, the population should be counted only once (difference compared to output O.15 where double counting is possible).	
Point of data collection, data source	• a) Application form plus confirmation/amendment on completion of operation if needed (Local Administrative Units concerned + population) (reported when the action is completed) [9] • b) Total rural population covered by the RDP area: national or regional statistics systems	
Additional information on the target dimension of the indicators (not included in the fiches)		
Target values attached to the indicator	• *At programme level: Yes, for the whole programming period* • *At operation level: Yes, in case the indicator is a selection criterion*	
Consequences for deviations from the targets	• *At programme level: No* • *At operation level: in general no, but some MS* (with a "*potential user approach*") *may impose sanctions (reduction of funds) if deviation is not fully justified by the beneficiary*[10]	

Source: Target indicator fiches for Pillar II (priorities 1 – 6) April 2015, summarised and complemented by Evaluation Helpdesk.

2. Use of similar indicators in other EU programmes

In the European Regional Development Fund (ERDF) programmes, the absolute number of the population covered benefiting from specific measures is used as a result indicator (not a quotient). For example, additional population served by improved waste water treatment, the population benefiting from flood protection measures or benefiting from forest fire protection measures or covered by

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[8] European Commission (2015): Working Document. Target indicator fiches for Pillar II (Priorities 1 to 6). Brussels.
[9] The amendment to Article 5(3) of Regulation (EU) No 215/2014, introduced by the Regulation (EU) No 276/2018, allows reporting on non-completed projects, where relevant.
[10] This presupposes that the beneficiaries have previously indicated a target value. In order to determine this target value, the beneficiaries need instructions for determination/calculation.

improved health services. It is pointed out that double counting is to be avoided, but no clear method is provided for this purpose.

Table 5.   Example: Population covered by improved health services

Unit	Name	Definition/Comments
Persons	Population covered by improved health services	Population of a certain area expected to benefit from the health services supported by the project. It includes new or improved buildings, or new equipment for various types of health services (prevention, outpatient or inpatient care, aftercare). The indicator excludes multiple counting even if the intervention benefits more services targeting the same persons. One person still counts as one even if that person will use several services, which were supported by Structural Funds. For example, an aftercare facility is developed in a city with a population of 100,000 inhabitants. It will serve half the city's population thus the indicator value will increase by 50,000. If later a prevention service is developed in the same city that will serve the whole population, the indicator value will increase by another 50,000.

Source: European Union (2014/ rev. 2018), Guidance Document on Monitoring and Evaluation–ERDF and Cohesion Funds, Concepts and recommendations, revision 2018, Annex 1