

Global Europe Results Framework Indicator Methodology Note

1. Indicator name
<p>GERF 2.18: Total length of transport infrastructure supported by the EU (kms): (a) roads, (b) railways, (c) waterways</p>
2. Technical details
<p><i>Please use the information provided in OPSYS or the SWD.</i></p> <p><u>Results Dashboard code(s)</u>: (a) 65231; (b) 65232; (c) 65233.</p> <p><u>Unit of measure</u>: kilometre (km).</p> <p><u>Type of indicator</u>: Quantitative (not Qualitative) – Numeric (not Percentage); Actual ex-post (not estimated or ex-ante); Cumulative (not annual); Direct (not indirect).</p> <p><u>Level(s) of measurement</u>: Specific Objective – Outcome; Direct Output; Output.</p> <p><u>Disaggregation(s)</u>: None</p> <p><u>DAC sector code(s)</u>: (a): 21020 – Road transport; (b): 21030 – Rail transport; (c): 21040 – Water transport.</p> <p><u>Main associated SDG</u>: 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human wellbeing, with a focus on affordable and equitable access for all.</p> <p><u>Other associated SDGs</u>: 8.1 growth; 8.2 diversification and innovation; 8.5 employment and decent work; 9.4 upgrade infrastructure and clean technology; 11.2 sustainable transport; 17.11 exports of developing countries.</p> <p><u>Associated GERF Level 1 indicator</u>: 1.15 Passenger and freight volumes, by mode of transport (SDG 9.1.2)</p> <p><u>Associated GERF Level 3 indicators</u>:</p> <p>3.4 Amount and share of EU-funded external assistance contributing to: (a) aid for trade, (b) aid for trade to LDCs, and (c) trade facilitation</p> <p>3.5 Leverage of EU blending and guarantee operations financed by EU external assistance, measured as: (a) Investment leverage ratio, (b) Total eligible financial institution financing leverage ratio, (c) Private financing leverage ratio</p> <p>3.13 Number and share of EU- external interventions promoting gender equality and women's empowerment</p> <p>3.14 Number and share of EU-funded external interventions promoting disability inclusion</p> <p>3.16 Amount and share of EU-funded external assistance qualifying as ODA</p>
3. Policy context and Rationale
<p>The EU has a long-standing commitment to supporting infrastructure development in partner countries. Investing in roads, railways and waterways in these countries is</p>

crucial for a number of reasons.

1. Economic growth and poverty reduction
 - A well-developed transport network is essential for economic growth and poverty reduction. Efficient infrastructure connects markets, reduces transportation costs and facilitates trade. This in turn stimulates economic activity, creates jobs and improves living standards.
 - The [Strategy for Africa 2030](#) outlines a commitment to promoting sustainable infrastructure development in partner countries. The strategy emphasizes the importance of investing in infrastructure that is environmentally friendly, energy-efficient and socially inclusive.
2. Trade facilitation and market access
 - Strong infrastructure is also important for facilitating trade and improving market access. For example, a well-maintained road network can connect agricultural producers to markets, while a modern railway system can connect industries to ports for export. This can help developing countries integrate into global markets and increase their export opportunities.
 - The EU's Global Gateway initiative aims to invest in infrastructure projects around the world that support sustainable development and connectivity. The initiative focuses on projects in partner countries that are important for trade and economic growth.
3. Social inclusion and poverty reduction
 - Investing in infrastructure can also improve social inclusion and reduce poverty. For example, improving access to roads and railways can connect remote communities to essential services, such as healthcare and education. This can help reduce inequalities and improve quality of life for people in rural areas.
4. Empowering local communities
 - Infrastructure development can also empower local communities. By providing employment opportunities during construction and maintenance, infrastructure projects can contribute to poverty reduction and skill development. Well-maintained infrastructure can also attract investment and create new business opportunities for local entrepreneurs.
5. Environmental sustainability
 - The EU is also committed to promoting sustainable infrastructure development. By investing in energy-efficient and environmentally friendly transport systems, the EU can help reduce the environmental impact of transportation in partner countries. This can help mitigate the effects of climate change and reduce air pollution.
 - The European Green Deal outlines a commitment to making the EU climate-neutral by 2050. This entails investing in infrastructure that is environmentally sustainable and promotes low-carbon development.

4. Logframe inclusion

If an intervention generates the result measured by this indicator, then it must be reported in OPSYS. Corporate targets have been set for the indicators used to monitor the Strategic Plan and the Multiannual Financial Framework (see Section 9). Progress towards these targets is reported annually in the Annual Activity Plan (for the Strategic Plan) and the Programme Performance Statements (for the Multiannual Financial Framework). These values are calculated by aggregating the results reported in OPSYS. These reports ultimately contribute to the Annual Management Performance Report submitted by the European Commission to the Council and Parliament during the annual budgetary discharge procedure. If targets are not met,

explanations must be provided. Therefore, it is crucial that all results are recorded in OPSYS.

There are two ways of doing this:

- Include the indicator directly in the logframe (recommended approach);
- Match the indicator to the closest logframe indicator (only if the indicator was not originally included in the logframe and modification is not possible).

Why? The matching functionality in OPSYS only accommodates reporting current values and does not yet support encoding baselines and targets. This is a significant drawback because targets are a valuable piece of information, especially at the beginning of a Multiannual Financial Framework. Indeed, results take time to materialise as they are the last step in the chain, appearing only after programming, commitments, contracting, and spending have occurred. Targets allow to see what results are expected long before they materialise, which is reassuring to the different stakeholders concerned with accountability. **Therefore, include all corporate indicators directly in the logframe whenever possible, and reserve the matching functionality only for cases when this is not feasible.**

5. Values to report

The following values must be determined in line with the definitions provided in Section 6.

Baseline value: the value measured for the indicator in the baseline year. The baseline value is the value against which progress will be assessed.

Current value:

- **For logframe indicators:** the most recent value for the indicator at the time of reporting. The current value includes the baseline value which is reported separately for logframe indicators in OPSYS.
- **For matched indicators:** the most recent value for the results achieved at the time of reporting since the start of implementation of the intervention. This value is obtained by taking the most recent value for the indicator at the time of reporting and subtracting off the baseline value which is not reported separately for matched indicators in OPSYS.

Current values will be collected at least once a year and reported cumulatively throughout the implementation period.

Final target value: the expected value for the indicator in the target year.

Intermediate target values (milestones). A tool has been developed in OPSYS to generate intermediate targets automatically¹.

¹ This has been done in the context of the Primary Intervention Questionnaire (PIQ) for the EAMR. Three new KPIs provide an overall assessment of ongoing interventions (current performance and future performance) and completed interventions (final performance). Scores will be calculated for all INTPA and NEAR interventions participating in the annual results data collection exercise.

- *KPI 10* reflects the relevance, efficiency and effectiveness of ongoing interventions. The information on relevance is provided by the Operational Manager's response to a question in a survey. The information on efficiency and effectiveness is provided either by the logframe data, if sufficient data is available, or the response to a question in a survey, if not.

- **For outputs:** the intermediate targets are generated using a linear interpolation between the baseline and target values because it is assumed that outputs materialise sooner and more progressively over implementation (than outcomes).
- **For outcomes:** the expected progression over the course of implementation will vary across interventions. During the creation of a logframe, the expected outcome profile must be selected (OPSYS offers four options²) and this selection triggers the generation of intermediate targets for all 30 June and 31 December dates between the baseline and target dates for all output and outcome quantitative indicators. All automatically generated intermediate targets values and dates can be subsequently modified by the Operational Manager or the Implementing Partner with the approval of the Operational Manager.

6. Calculation of values

Specify all assumptions made, list definitions for all technical terms, provide any relevant guidance on (double) counting, and include checklist for quality control.

The value for this indicator is calculated by counting the number of kilometres of transport infrastructure (roads, railways and waterways) supported by the EU, using the technical definitions and counting guidance provided below. Please double check your calculations using the quality control checklist below.

Technical definitions

Support can include a) construction, b) rehabilitation and c) maintenance. The construction, rehabilitation, and maintenance of roads, railways and waterways encompass a broad range of activities that aim to improve the efficiency, safety and functionality of the infrastructure.

Roads should be part of the classified network of a country, which includes the sum of the primary, secondary and tertiary networks. The different components of the network are often allocated to different administrative jurisdictions.

- **Primary network:** Primary, main, trunk, or national roads are roads outside urban areas that belong to the top-level road network, connecting a country's main population and economic centres. These roads are usually of comparatively higher quality.
- **Secondary network:** Secondary or regional roads are the main feeder routes into, and provide the main links between, primary, main, trunk or national roads.
- **Tertiary network:** Tertiary, local, or rural roads are typically unpaved and have a

- *KPI 11* reflects expectations regarding the most probable levels of relevance, efficiency, effectiveness and sustainability that can be achieved by ongoing interventions in the future. In this case, all the information is provided by the Operational Manager's responses to questions in a survey.
- *KPI 12* reflects the relevance, efficiency and effectiveness of completed interventions. The information on relevance is provided by the Operational Manager's response to a question in a survey. The information on efficiency and effectiveness is provided by the logframe data if sufficient data is available, or the response to a question in a survey, if not.

² a. *steady progress*: The outcomes are achieved continuously throughout implementation; b. *accelerating progress*: The outcomes are achieved towards the end of implementation; c. *no progress until end*: The outcomes are mostly achieved at the end of implementation; d. *none of the above*.

comparatively low level of traffic.

Road construction includes the following activities.

- New road construction: Building new roads from scratch, including grading, paving and the installation of signage, markings and drainage systems.
- Road widening: Expanding the existing width of a road to accommodate more traffic.
- Road realignment: Modifying the alignment of a road to improve its curvature and grade, making it safer and more efficient for travel.
- Road reconstruction: Completely replacing an existing road, including removing the old paving, grading the subgrade and installing new paving, signage, markings and drainage systems.
- Bridge construction: Building new bridges to cross rivers, streams or other obstacles.
- Tunnel construction: Excavating tunnels to go under mountains, hills or other obstructions.

Road rehabilitation includes the following activities.

- Road repair: Fixing potholes, cracks and other damage to the road surface to restore its smoothness and durability.
- Road resurfacing: Replacing the existing road surface with a new layer of asphalt or concrete to increase its lifespan and improve its performance.
- Road patching: Filling in small holes or depressions in a road surface to prevent further damage and make the road safer.
- Road marking maintenance: Repainting road markings, such as lane lines, pedestrian crossings and signs, to ensure they are visible and clear to motorists.
- Road sign maintenance: Replacing or repairing damaged or outdated road signs to ensure they give motorists accurate and up-to-date information.

Road maintenance includes the following activities.

- Regular road sweeping: Sweeping roads to remove debris, leaves and other objects that can obstruct traffic and damage the road surface.
- Road debris removal: Removing large objects, such as fallen trees, rocks and abandoned vehicles, from the road to ensure safe passage for motorists.
- Road vegetation control: Trimming trees, shrubs and grasses along the road to prevent them from encroaching on the road surface and obstructing visibility.
- Road drainage maintenance: Cleaning and inspecting drainage ditches, culverts and other drainage structures to ensure they are functioning properly and preventing water from pooling on the road surface.
- Road lighting maintenance: Inspecting and repairing malfunctioning or damaged streetlights to ensure they provide adequate illumination for safe driving at night.

Railways should only include electric railways. Non-electric railways using diesel or steam locomotives should not be counted.

Railway construction includes the following activities.

- New railway construction: Building new railway lines from scratch, including

laying tracks, constructing bridges and tunnels and installing signalling and electrification systems.

- Track laying: Laying new tracks to extend or replace existing tracks.
- Bridge and tunnel construction: Building new bridges and tunnels to go over or under obstacles, such as rivers, valleys and mountains.
- Signalling system installation: Installing and maintaining signalling systems to control the movement of trains and ensure the safety of railway operations.
- Electrification: Installing and maintaining the electrical infrastructure that powers trains, including overhead catenary wires, substations and transformers.
- Railway station construction: Building new railway stations for passengers and freight.

Railway rehabilitation includes the following activities.

- Track repair: Repairing damaged tracks to restore their stability and durability. This may involve patching up cracks, replacing worn-out ballast and realigning track segments.
- Bridge and tunnel repairs: Repairing damaged bridges and tunnels to restore their structural integrity and safety. This may involve replacing damaged concrete or steel components, repairing cracks or leaks and strengthening foundations.
- Signalling system maintenance: Regularly inspecting and maintaining signalling systems to ensure they are functioning properly and giving train operators accurate information. This may involve replacing faulty components, calibrating sensors and updating software.
- Electrification maintenance: Regularly inspecting and maintaining electrical infrastructure to ensure it is operating safely and efficiently. This may involve replacing damaged cables, repairing faulty transformers and ensuring that overhead catenary wires are properly tensioned.
- Railway station maintenance: Maintaining railway stations to ensure they are clean and safe and that passengers can access them. This may involve repairing or replacing flooring, painting walls and upgrading lighting and signage.

Railway maintenance includes the following activities.

- Regular track inspections: Regularly inspecting tracks to identify and repair any damage before it causes derailments or creates other safety hazards. This may involve using specialised vehicles or drones for visual inspections.
- Regular bridge and tunnel inspections: Regularly inspecting bridges and tunnels to identify and repair any damage before it compromises their structural integrity. This may involve using specialised equipment to do ultrasonic testing or borehole inspections.
- Regular signalling system testing: This involves regularly testing signalling systems to ensure they are functioning properly and giving train operators accurate information. This may involve conducting simulations or using test vehicles to simulate real-world conditions.
- Regular electrification system testing: Regularly testing electrical infrastructure to ensure it is operating safely and efficiently. This may involve measuring voltage levels, checking insulation resistance and doing load tests.
- Regular railway station cleaning: Regularly cleaning railway stations to remove

debris, graffiti and other unsightly elements. This may involve sweeping floors, emptying trash cans and washing walls and windows.

Waterways should only be counted if, at an intervention's end, they are navigable.

Waterway construction includes the following activities.

- Dredging: Removing sediment from the bottom of a waterway to deepen and widen it, making it more navigable for boats.
- Bank stabilisation: Constructing dikes, levees and other structures to prevent erosion and maintain the integrity of waterway banks.
- Channel realignment: Modifying the course of a waterway to improve its alignment and reduce the risk of flooding and sedimentation.
- Construction of locks and dams: Building structures to control the water level in a waterway, enabling the passage of boats despite changes in elevation.

Waterway rehabilitation includes the following activities.

- Repair of damaged infrastructure: Repairing damaged bridges, culverts and other structures that support navigation.
- Rehabilitation of eroded banks: Restoring the stability and integrity of eroded waterway banks to prevent further erosion and maintain waterways' navigability.
- Restoration of riparian vegetation: Replanting trees, shrubs and grasses along waterways to stabilise their banks, prevent erosion and provide a habitat for wildlife.
- Removal of obstructions: Removing sunken vessels, debris and other obstructions to navigation.

Waterway maintenance includes the following activities.

- Regular dredging: Regularly removing sediment from waterway channels to maintain their depth and width.
- Monitoring water levels: Monitoring water levels to ensure they are within acceptable limits for navigation.
- Inspection of infrastructure: Regularly inspecting bridges, culverts and other structures to identify and repair any damage.
- Weed control: This involves controlling the growth of aquatic plants that can obstruct navigation and reduce water quality.
- Habitat restoration: Restoring and enhancing the habitat for aquatic species, such as fish, shellfish and waterfowl.

Counting guidance

1. Support includes construction (all completely new and upgraded transport infrastructure), rehabilitation (whereby the transport infrastructure is returned to its previous condition), and maintenance (all work that slows down the rate of deterioration of the transport infrastructure by identifying and addressing specific deficiencies).
2. Double-counting is not allowed: the same length of transport infrastructure may only be reported once for this indicator. If the same length of transport infrastructure benefits from more than one form of support during the same reporting period, that length of transport infrastructure should only be counted once. To avoid the double counting of transport infrastructure over time, two approaches are possible. If it is possible to reliably estimate the length of

transport infrastructure supported in the first year, and the length of new transport infrastructure supported in the following years (i.e. not yet supported during the reporting period in question), these numbers can be added up without the risk of double counting. However, if this information is not available, the maximum result of the reporting period should be used instead. Record the calculations in the calculation method field to facilitate quality control of the values reported. Report the geographic location of the transport infrastructure in the comment field to facilitate quality control of double counting.

Quality control checklist

1. Has the indicator been included directly in the logframe? Reserve the OPSYS matching functionality only for cases when this is not feasible.
2. If the indicator has been included directly in the logframe, does the current value *include* the baseline value? If the indicator has been matched to a logframe indicator, does the current value *exclude* the baseline value?
3. Has support to construction, rehabilitation and maintenance been considered?
4. Is the GERF value correctly calculated? 100 km of two-lane motorway only counts as 100 km.
5. Has double counting been avoided? The same length of transport infrastructure should be counted only once.
6. Have all calculations been recorded in the calculation method field? Has all relevant information, including the geographic location of results, been reported in the comment field?

7. Examples of calculations

Example 1

In Country A, the EU has financed the construction of 183 kms of roads on the primary road network, and 265 kms of rural roads that are not part of the classified network. All works are built as follows: 0 km (year 1), 83 km of primary roads + 200 km of rural roads (year 2), 100 km of primary roads + 65 km of rural roads (year 3). The value to report for part (a) of this indicator at the end of year 3 is 183 km.

Example 2

In Country B, the EU is supporting the upgrading of 183 kms of railway. In year 1, the European Rail Traffic Management System (ERTMS) was introduced for 100 km of track. In year 2, 20 km of urban tracks were equipped with noise reduction screens.

Case A) Based on the Implementing Partner's reports it is clear that the 100 km upgraded in year 1 are different from those benefiting from noise reduction screens in year 2. The value to report for part (b) of this indicator at the end of year 2 is the sum of all tracks reported: 100 km in year 1 and 120 km in year 2.

Case B) There is no information in the Implementing Partner's reports on the location of the tracks supported in years 1 and 2. To avoid double counting and because there is no information about where the tracks were upgraded in years 1 and 2, The value to report for part (b) of this indicator at the end of year 2 is the maximum length of track supported annually: 100 km in year 1 and 100 km in year 2.

8. Data sources and issues

Please use the data source categories specified in OPSYS.

EU intervention monitoring and reporting systems: *Progress and final reports for the EU-funded intervention; ROM reviews; Baseline and endline surveys conducted and budgeted by the EU-funded intervention.*

Include any issues relating to the availability and quality of the data.

9. Reporting process & Corporate reporting

The data collected on this indicator will be reported in OPSYS by the Implementing Partner. The values encoded in OPSYS will be verified, possibly modified and ultimately validated by the Operational Manager. Once a year the results reported will be frozen for corporate reporting. The methodological services in HQ that are responsible for GERF corporate reporting will perform quality control on the frozen data and aggregate as needed to meet the different corporate reporting requirements.

This indicator is used for corporate reporting in the following contexts:

- *NDICI via the Annual Report*
- *NDICI via the Programme Statements*
- *INTPA Strategic Plan via the Annual Activity Report*
- *NEAR Strategic Plan via the Annual Activity Report*
- *FPI Strategic Plan*

This indicator has been included in the following other Results Measurement Frameworks:

- *EFSD+*
- *GAP III*
- *IPA III*
- *TEI-MORE*

10. Other uses

GERF 2.18 can be found in the following thematic results chains:

- [Sustainable Cities](#)

GERF 2.18 can be found in the following groups of EU predefined indicators available in OPSYS, along with other related indicators:

- Oceans (*c only*)
- Sustainable cities (*a & b only*)
- Sustainable transport

For more information, see: [Predefined indicators for design and monitoring of EU-funded interventions | Capacity4dev \(europa.eu\)](#)

External bodies using the same or similar indicator:

- African Development Bank: Roads constructed, rehabilitated or maintained (km); cross-border roads constructed or rehabilitated (km)
- Asian Development Bank: Roads built or upgraded (kilometres)
- World Bank: Roads constructed and rehabilitated (kilometres, thousands)

11. Other issues