Measure/investment Flemish Social Climate Plan:

Title of the measure/investment:

Strengthening affordable and accessible public transport in vulnerable, underserved areas through new automated demand-responsive mobility services

Measure covered by the component (delete as appropriate):
- ~~Buildings~~
- Mobility

Measure falls under the following target group (delete as appropriate):
- Vulnerable households
- ~~Vulnerable micro-enterprises~~

Description of the measure/investment
Clear and evidence-based analysis of the existing challenges and how they are addressed by the measures and investments
For detailed explanation, see also section 3 in the Guidance note.

Executive summary of proposed measure and investments

This measure will invest **EUR 41.7 million** in two new zero-emission automated feeder-corridor public transport services for vulnerable transport users in Flanders. It targets areas where **low income and poor public transport accessibility overlap**, identified through the TML/De Lijn red-sector methodology. Based on current analysis, the two preselected deployment corridors are **Kortrijk-Deinze** and **Menen-Roeselare**.

SCF support will finance automated demand-responsive feeder services and, where needed, larger automated vehicles to connect eligible red-sector areas with public transport hubs and key destinations such as healthcare, education, employment and shops. The measure will deploy **17 smaller automated vehicles and 6 larger automated vehicles**, with operations starting in **Q3 2029**.

The 2026 baseline shows an important accessibility challenge: **38,577 eligible low-income or red-sector residents in these two zones** currently do not have usable access to public transport according to the SCF accessibility definition. These areas also generate a high level of fossil-fuel car travel, resulting in 105.7 $ktCO_2e$/year of emissions.

The measure is additional to existing De Lijn services and current automated transport pilots. Its expected impact is improved public transport accessibility, reduced dependence on private cars and measurable CO_2 reductions by 884 tCO_2e/year. By integrating automated feeder services into the De Lijn network, the measure aims to deliver lasting mobility benefits beyond 2032.

1. The challenge: increasing transport vulnerability under ETS2

The introduction of ETS2 will increase the cost of fossil-fuel-based road transport and can therefore aggravate transport poverty for vulnerable households and vulnerable transport users. The Social Climate Fund is designed to address the social impacts of ETS2 on vulnerable households, vulnerable micro-enterprises and vulnerable transport users, including through clean mobility measures that improve access to affordable and accessible public transport and sustainable mobility-on-demand services [SCF Regulation / SCF Guidance].

This challenge is particularly relevant in Flanders because daily mobility remains strongly car-dependent. According to the Flemish Travel Behaviour Survey OVG 7 (2023–2024), the average Flemish resident makes 2.63 trips per day and travels 29.27 km per day. The car remains the dominant mode of transport: 45.8% of trips are made as driver and 14.5% as passenger. Where no realistic alternative exists, higher fossil-fuel transport costs can therefore translate directly into higher vulnerability.

The households and transport users most exposed to this risk are those with limited financial capacity and limited access to alternative mobility options. They may rely on fossil-fuelled car use because the public transport offer is insufficient, inaccessible at the required time of day, or too far away to be usable. Many vulnerable users also face barriers to switching: they cannot easily purchase a cleaner vehicle, use private shared mobility services, or invest in alternatives such as electric cars or electric bicycles. Practical barriers such as lack of a driving licence, limited digital access, disability or reduced mobility, care responsibilities, irregular working hours and poor access to safe stops or hubs can further reduce their ability to change mobility behaviour.

This analysis is consistent with the European Commission's 2025 Recommendation on transport poverty, which highlights the need to improve transport services in low-income areas, connect these areas to centres and services, support zero-emission on-demand services, and improve accessibility for people with disabilities [Commission Recommendation (EU) 2025/1021].

2. Identifying the areas most affected by transport poverty

Transport poverty is most acute where two structural vulnerabilities overlap:

1. **Poor public transport accessibility**; and
2. **Low-income levels**.

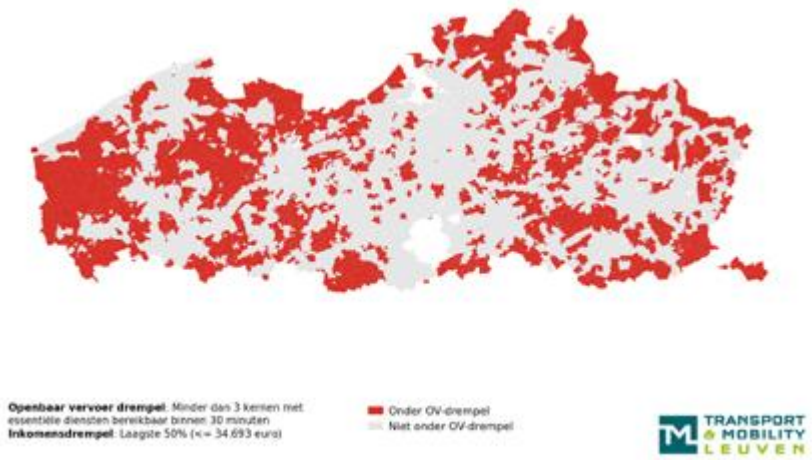
To identify these areas objectively, the measure uses statistical sectors as the territorial targeting level. Statistical sectors are small official geographical units used in Belgium for socio-economic analysis. This allows SCF support to be directed towards areas where financial vulnerability and poor accessibility reinforce each other.

The eligible areas are identified using geospatial accessibility and income analysis developed by Transport & Mobility Leuven in cooperation with De Lijn and further enriched for the Social Climate Plan. The mapping identifies statistical sectors that meet two cumulative vulnerability criteria.

Accessibility criterion

The sector falls below the public transport accessibility threshold: fewer than three centres with essential services can be reached by public transport within a 30-minute journey time. The geographical distribution of these sectors is shown in **Figure 1**.

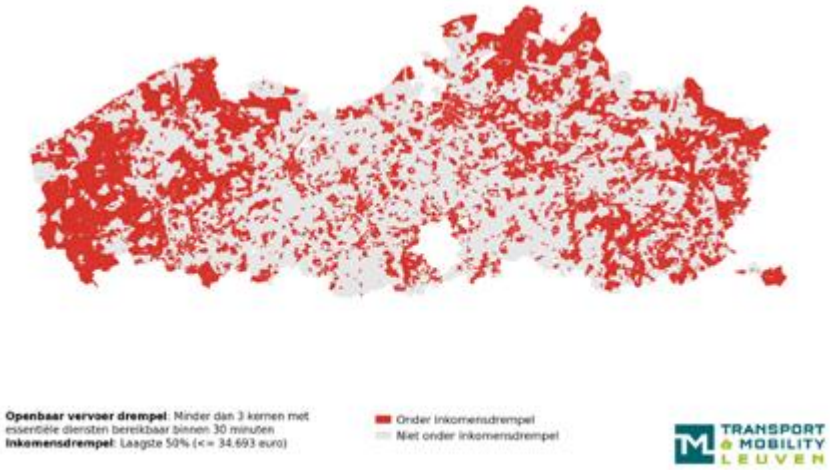
Figure 1 Sectors below the public transport threshold



Income criterion

The sector falls below the income threshold: the median taxable income per tax return is at or below EUR 34,693, corresponding to the lowest 50% of sectors by this income indicator. The sectors meeting this criterion are presented in **Figure 2**.

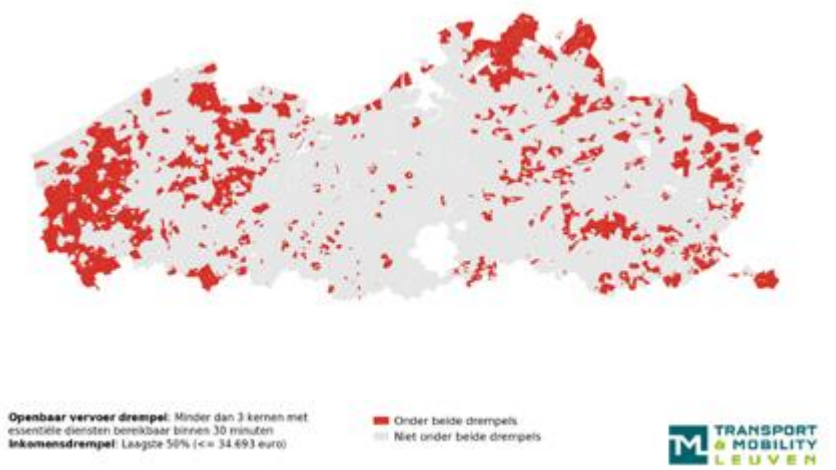
Figure 2 Sectors below the income threshold



Eligible target areas

Statistical sectors meeting both criteria are classified as eligible **red sectors** for this measure. These red sectors form the primary targeting basis for the investment. The overlap between the accessibility and income criteria is illustrated in **Figure 3**.

Figure 3 Sectors below both thresholds



3. Why improved transport-on-demand services are needed

Under the Flemish basic accessibility model, the public transport network consists of four layers:

- the train network;
- the core network;
- the supplementary network; and
- transport-on-demand (flex transport).

The Flemish Government describes transport-on-demand as the layer that can provide a solution at locations, times or for target groups for which the train network, core network or supplementary network is not accessible.

This is precisely the type of gap observed in the eligible red sectors identified in **Figure 3**. Many residents live in scattered residential areas, villages or neighbourhoods that lack a reliable way to reach a useful hub, station, corridor or essential destination within an acceptable travel time, even where public transport exists in the wider region.

Flex transport is therefore the most relevant public transport layer for addressing these accessibility gaps. It is a demand-responsive, stop-based public transport service through which passengers request a trip in advance and travel between designated flex stops, or between a flex stop and a hub of the regular public transport network. It can connect residential areas, villages and hard-to-reach zones to bus, tram and train services and supports essential journeys to work, education, healthcare, shops and basic services.

This corresponds directly to the Social Climate Fund guidance, which recognises on-demand services, first- and last-mile public transport, and the extension of public transport in underserved rural, urban and suburban areas as relevant forms of support where they benefit vulnerable transport users [SCF Guidance, Section III.3(g)].

4. Limitations of the current approach and the need for additionality

Conventional flex transport can address accessibility gaps, but every expansion in service area, operating hours or frequency generally increases recurring operating expenditure and driver requirements. This creates a scalability challenge, particularly in lower-density areas where passenger volumes are dispersed.

Flemish policy already recognises flex transport as a dedicated layer and has allocated substantial public resources to it. In 2024, the annual budget for the transport regions' flex transport layer was expected to build up to EUR 65 million [Vlaanderen, budgets for basic accessibility].

This existing investment is important from an additionality perspective. The SCF measure should not finance the ordinary continuation of existing flex transport services. Instead, it should create additional, socially targeted public transport capacity in areas where the baseline offer remains insufficient under the SCF/red zone accessibility definition, as identified through the mapping shown in **Figure 3**.

5. The proposed solution: automated zero-emission public transport

To address these challenges, the measure uses the Social Climate Fund to support a structured deployment of automated, zero-emission, demand-responsive public transport.

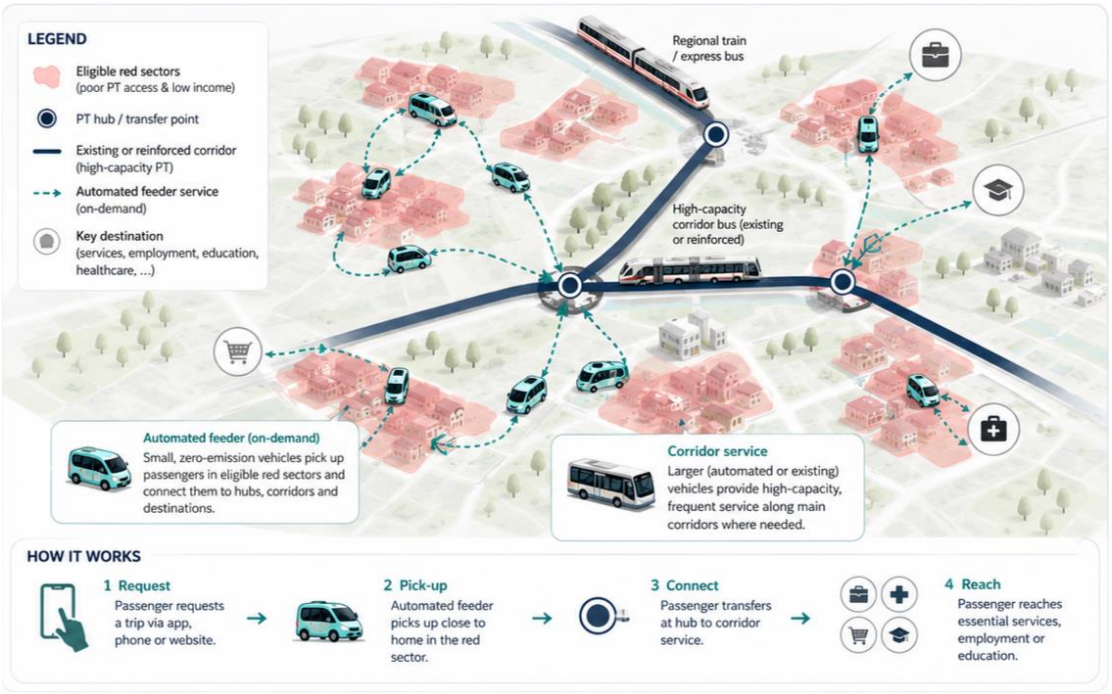
Automated vehicles can provide feeder and first-/last-mile connections from red sectors to:

- mobility hubs;
- railway stations;
- bus and tram corridors;
- employment areas;
- educational facilities;
- healthcare services; and
- other essential destinations.

Automation is used as an operating model to make additional socially targeted public transport capacity more viable beyond the SCF period. The investment creates assets and capabilities that remain after 2032, including vehicles, digital integration, route validation, remote supervision arrangements and operational know-how.

An illustration of this operating concept is provided in **Figure 4**, which shows autonomous shuttles connecting red sectors to transport hubs and the wider public transport network.

Figure 4: Example of autonomous shuttles connecting red sectors to transport hubs



Why a shared public model?

The rationale for choosing a shared and public automated model is supported by De Lijn's preparation work on autonomous transport. De Lijn's strategic analysis distinguishes between:

- private autonomous vehicles;
- robotaxis; and
- pooled roboshuttles.

Private autonomous vehicles and robotaxi-like models can generate additional empty kilometres and low-occupancy traffic. Pooled roboshuttles offer a more efficient and inclusive shared mobility model, with higher occupancy and stronger integration into public transport. The SCF measure therefore prioritises pooled, public, demand-responsive automated services rather than private autonomous mobility.

6. Deployment strategy: corridor-feeder services

The measure will be implemented through two automated corridor-feeder deployment zones. Based on internal pre-analysis by De Lijn, the two preselected deployment corridors are:

- **Kortrijk–Deinze**;
- **Menen–Roeselare**.

These corridors were selected because they combine a concentration of eligible red sectors with a functional opportunity to connect underserved areas to stronger public transport corridors, hubs and essential destinations. The selection was based on five criteria:

1. red-sector eligibility;
2. functional connection to hubs, corridors or essential destinations;
3. additionality compared with the 2026 baseline;
4. technical feasibility for automated zero-emission operation by 2032;
5. cost-effectiveness within the available budget (approx €40 million).

The exact operational perimeter may still be refined during implementation if further analysis identifies a higher-impact configuration. Preliminary analysis demonstrates that the most high potential areas in response to the 5 selection criteria are found in the provinces West-Vlaanderen and Limburg. Any refinement will remain in line with the same SCF targeting logic: serving eligible low-income or red-sector residents with no/poor usable public transport access.

The geographical scope of the first deployment zone is shown in **Figure 5**, while the second deployment zone is shown in **Figure 6**.

Figure 5: Kortrijk-Deinze corridor

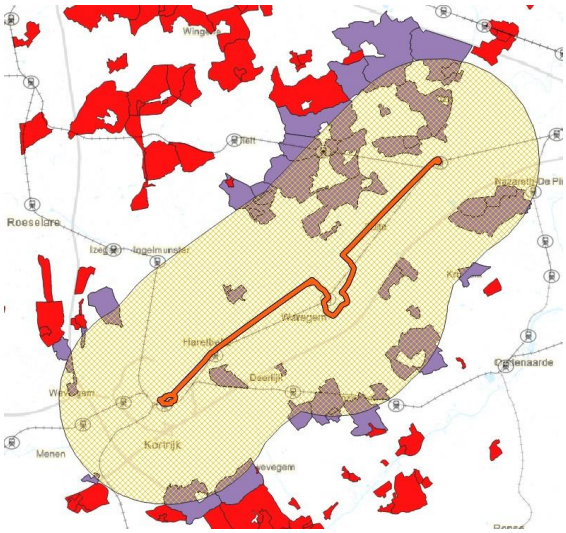
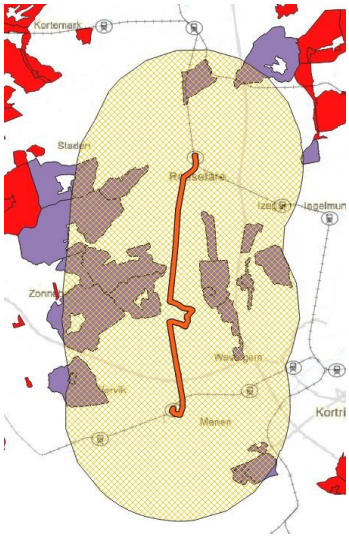


Figure 6: Menen-Roeselare corridor



In each selected corridor, the intervention design starts from the eligible red sectors identified through the TML/De Lijn map. De Lijn and MOW then identify the nearest relevant public transport hubs, fixed corridors and essential destinations that can provide useful onward connectivity. The automated feeder services are designed to connect eligible red sectors to these hubs, corridors and destinations.

Smaller automated vehicles will provide demand-responsive feeder connections from eligible red sectors to hubs, corridors and essential destinations. Larger automated vehicles may reinforce

selected corridor sections where this is necessary to make the feeder connection effective, for example by improving transfer quality, frequency or capacity.

The corridor element is therefore an enabling part of the targeted accessibility solution rather than a generic corridor upgrade. The relationship between underserved red sectors and the wider transport network is illustrated conceptually in **Figure 4** and operationalised through the corridors shown in **Figures 5 and 6**.

This approach is necessary because the destinations and transfer points that vulnerable users need to reach are often located outside the eligible red sectors themselves. Automated services may therefore cross or operate in non-red statistical sectors where this is necessary to connect residents of eligible red sectors to public transport hubs, corridors or essential destinations. In such cases, the eligibility logic is still connected with the red-sector origin population, and the service must demonstrate that it mainly benefits vulnerable transport users. This Route Extension Rule allows the measure to create functional public transport access.

Where detailed design selections go beyond the available EUR 41.7 million budget, priority will be given to service configurations that reach the highest number of eligible residents, address the most severe accessibility gaps, provide the strongest functional connection to hubs or essential destinations, and offer a credible continuation path after the SCF-supported measures in 2032.

The nature, type and size of the measure or investment, including whether it is a new measure or an existing measure or investment intended to be extended with the support of the Fund

See also below under Financing and Costs, where further input is requested on this point. For detailed explanation, section 9 of the Guidance note. The Fund can only finance new measures or scale up existing ones (under defined conditions)

The measure is an **investment in additional, zero-emission, automated, demand-responsive public transport capacity** for vulnerable and underserved areas in Flanders.

It should be understood as a **new SCF-funded deployment layer** within the Flemish public transport model of basic accessibility. It builds on the role of transport-on-demand/flex transport, but it does not finance the ordinary continuation of existing flex transport services. The SCF-financed part is a new, additional and socially targeted deployment of automated corridor-feeder services in selected red-sector areas.

The measure has a total size of **EUR 41.7 million** and will be implemented from **2027 to 2032**, with the first SCF automated demand-responsive mobility service operational by **Q3 2029** and both services operational by **Q2 2032**.

1. Type of measure: targeted scale-up and qualitative transformation

The SCF can finance new measures or investments, or the scaled-up part of existing measures and investments. In this case, the measure combines three forms of additionality.

1) Creation of **new service output** above the 2026 baseline. SCF support will finance new automated corridor-feeder services, new automated vehicles and new zero-emission service output.
2) Allows for a **targeted scale-up**. The additional capacity is directed to eligible red statistical sectors where poor public transport accessibility and income vulnerability overlap.
3) **Qualitative transformation**. The measure changes the operating model from conventional, driver-dependent flex transport towards zero-emission automated public transport supported by digital integration, route validation, remote supervision and operational data systems.

The measure therefore uses the flex transport layer as the relevant public transport operations, but introduces a new automated, zero-emission service model for areas where the existing baseline remains insufficient under the SCF/red zone accessibility definition.

2. Relationship with the existing flex transport baseline

Flanders already has a dedicated flex transport layer within the basic accessibility model. This existing baseline is important for additionality. The current baseline for the Flemish flex transport system is estimated at 1,129,600 passengers in 2024, with an average occupancy rate of 1.53 passengers per flex bus. With this background, the SCF measure will be treated as a separate additional deployment and not as a general continuation of existing flex transport. It will finance additional service capacity, assets and operating capabilities on top of the pre-existing baseline.

The SCF measure will not finance:

- the normal continuation of existing flex transport services;
- existing De Lijn public transport services;
- existing service areas already financed through regular budget lines;
- replacement of regular Flemish public transport expenditure.

3. Why the measure is not structured as conventional service expansion

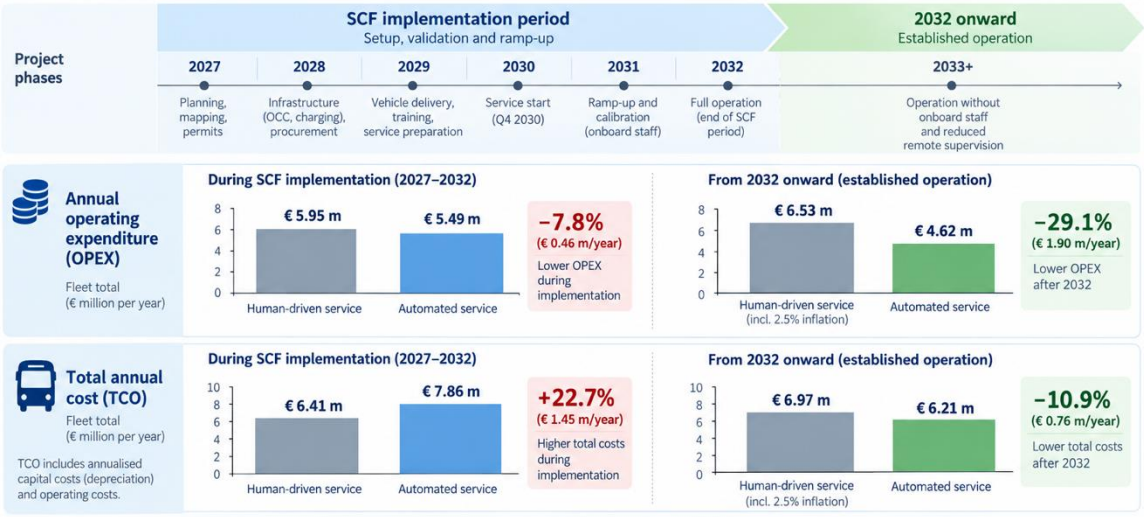
De Lijn's cost comparison covers a fleet of 17 automated on-demand vehicles and six automated corridor buses, compared with an equivalent human-driven fleet. It distinguishes setup and ramp-up from the established operating model projected for 2032. The estimates combine conventional-service cost data, early market consultations with potential automated-vehicle suppliers and deployment assumptions. They are projections, rather than measured savings from the proposed services. The exact type of vehicles is not known yet as it will be finally known once the procurement process is finished. In the last phase of the procurment, starting in November 2026, the suppliers will present their their exact models and configurations.

Total Cost of Ownership (TCO) is expressed here as an annualised cost comprising annualised capital costs and annual operating expenditure (OPEX). OPEX is presented separately to show the recurring expenditure required to operate the services, but is already included in TCO and must not be added to it again. The cost breakdown tables in the "Financing and Costs" section show cumulative expenditure over 2027–2032, rather than annual TCO.

During setup and ramp-up, higher capital requirements, onboard safety stewards and intensive supervision contribute to the cost of preparing, validating and bringing the automated services into operation. For on-demand vehicles, estimated annual TCO is 15.0% higher than for the human-driven comparator, while annual OPEX is 12.8% lower. Across the combined fleet of 17 on-demand vehicles and six corridor buses, annual OPEX is estimated at EUR 5.49 million for automated operation and EUR 5.95 million for human-driven operation, a reduction of 7.8%.

For established operation from 2032 onwards, the model assumes operation without onboard safety stewards and reduced remote-supervision staffing requirements per vehicle, following operational validation and authorisation. Annual fleet OPEX is projected at EUR 4,624,568 for automated operation, compared with EUR 6,525,489 for human-driven services. The conventional forecast incorporates annual inflation of 2.5%. This represents a projected operating-cost saving of approximately EUR 1.90 million per year, or 29.1%.

Including annualised capital costs, projected annual TCO is EUR 6.21 million for automated services and EUR 6.97 million for human-driven services. Automated operation therefore offers a projected reduction in annual total costs of approximately EUR 0.76 million, or 10.9%, in established operation beyond 2032. This lower overall annual cost, including both capital and operating costs, strengthens the financial basis for continuing the services after SCF support ends.



This is particularly relevant because Flanders already invests substantially in the existing flex transport layer. In 2024, the annual budget for the transport regions' flex transport layer was expected to build up to **EUR 65 million**. The SCF measure should therefore create structural additionality rather than temporarily reinforcing the same cost structure.

The measure requires substantial upfront investment to create durable public transport capacity. The investment establishes vehicles, software, route validation, charging readiness, remote supervision, operational processes and data systems that can support continued service after the SCF period.

De Lijn's internal preparation work on autonomous transport supports this approach. Its financial modelling distinguishes between short-term investment needs and longer-term operational effects. In a mature 2040 system, autonomous bus and roboshuttle services are expected to support a larger public/shared transport offer while reducing long-term dependence on conventional, driver-based service expansion. This wider transformation extends beyond the SCF measure, but it provides the rationale for using SCF support to create a socially targeted early deployment layer.

4. Relationship with De Lijn's wider automated transport roadmap

The measure is aligned with De Lijn's broader pathway towards automated public transport, but it does not finance that pathway as such. De Lijn is already preparing a first wave of automated public transport activities outside the SCF. These include demonstration and early deployment activities like in Leuven and Antwerp Noorderdokken. These activities build technical, operational and organisational readiness, including experience with automated vehicles, safety validation, remote supervision, passenger communication, procurement and integration into the public transport network.

For example, De Lijn has already started operational learning in Leuven, where two autonomous shuttles have been tested in city traffic and integrated into the public transport context. This existing pilot is not counted as an SCF output, but it demonstrates that De Lijn and the Flemish

public transport ecosystem are building technical and organisational experience with automated public transport.

The SCF creates a separate second deployment layer: two new, socially targeted automated corridor-feeder public transport zones for eligible red-sector areas (see Figure 8).

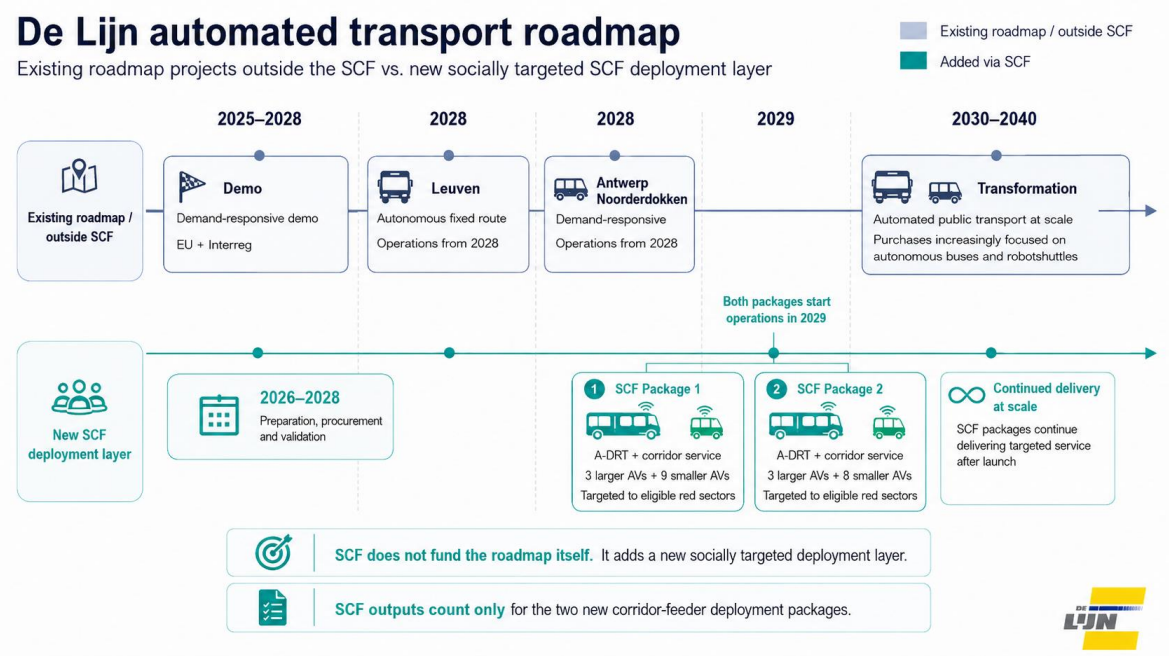


Figure 8. Existing roadmap vs the new socially targeted SCF deployment layer

This distinction is central to the additionality logic. SCF supports the socially targeted application of automated public transport in underserved areas where transport disadvantage and financial vulnerability both combine.

Initial evaluation results from the Leuven pilot

De Lijn's automated shuttle pilot in Leuven opened to the public on 22 January 2026. An interim passenger survey presented on 3 September 2026, conducted through an onboard QR code, reported:

- Survey participation: 189 overall satisfaction responses, including 122 completed questionnaires.
- Overall satisfaction: an average of 8.4/10, with 89% awarding at least 7/10.
- Service experience: 89% rated perceived safety at least 7/10, compared with 83% for comfort and 78% for ease of use (185–189 responses per aspect).
- Vehicle speed: 66% awarded at least 7/10. Speed was the main improvement priority, with comments describing driving as sometimes too slow or passive.
- Willingness to use automated buses: 95% expressed willingness to use them in everyday life, scoring at least 6/10 (171 respondents).

- Stated travel intentions: under a scenario of wider deployment, 53% said they would use buses more often and 51% would use cars less often (155–157 respondents). These are intentions, not measured changes in travel behaviour.

The findings provide encouraging early evidence of passenger acceptance and highlight journey times and usability as priorities for the proposed SCF services. However, participation was voluntary, many respondents were first-time users, and curiosity frequently motivated participation. Results remain provisional and cannot establish representative acceptance among vulnerable users, sustained ridership, realised modal shift or operating-cost savings. These outcomes require further monitoring.

The Leuven pilot remains outside the SCF-funded outputs and provides preparatory learning for the two additional deployment zones.

5. Deployment configuration

The measure will finance two automated corridor-feeder deployment zones in the preselected SCF corridors:

- **zone 1: Kortrijk–Deinze**
  3 larger automated vehicles and 9 smaller automated vehicles.
- **zone 2: Menen–Roeselare**
  3 larger automated vehicles and 8 smaller automated vehicles.

Across both zones, the SCF measure will deploy:

- **17 smaller automated vehicles**;
- **6 larger automated vehicles**;
- **23 zero-emission automated vehicles in total**.

The smaller vehicles will provide demand-responsive feeder services from eligible red sectors to hubs, corridors and essential destinations. The larger vehicles will operate on selected corridor sections only where they are necessary to make the feeder connection effective, for example by providing sufficient transfer quality, frequency or capacity.

6. Nature of expenditure

The measure is primarily investment-led, with substantial enabling deployment costs and time-limited operational ramp-up costs (for example, on-board safety operations will be required in the first year of operation). The main expenditure concerns capital and enabling investments that create durable public transport assets and operational capability beyond 2032.

Limited operational expenditure is included only where necessary for deployment, initial operation, ramp-up, optimisation, monitoring and transition. It is not intended as a permanent operating subsidy.

The measure contains two internal cost blocks.

Cost Block A: CAPEX and enabling investment

This is the core of the measure. It covers the assets, systems and readiness investments needed to deploy automated, zero-emission demand-responsive public transport.

Eligible expenditure under this block may include:

- zero-emission automated DRT shuttles for feeder and first-/last-mile services;
- larger zero-emission automated vehicles where needed for selected corridor sections;
- onboard automated-driving systems and vehicle automation equipment;
- vehicle commissioning and operational readiness costs;
- software licences and automated-driving platform costs;
- booking, dispatch and passenger-interface integration with De Lijn systems;
- data exchange and monitoring systems needed for SCF reporting;
- remote supervision and operations-control-centre readiness;
- route mapping and high-definition mapping where required by the technology;
- technical validation, safety case preparation and route-readiness activities;
- charging infrastructure directly linked to the automated zero-emission fleet;
- light depot or service-readiness adaptations necessary for deployment.

Larger automated corridor vehicles may be financed only where they are functionally linked to the feeder service and necessary to provide effective public transport access for eligible red-sector users.

Cost Block B: temporary operational ramp-up

This block covers the limited operational expenditure necessary to bring the automated services into use and ensure that they function as public transport services during the SCF period.

Eligible expenditure may include:

- initial operation of automated feeder and corridor-feeder services during the ramp-up period;
- remote supervision ramp-up and operational staffing during the first deployment phase;
- staff training and retraining for remote supervision, first-line incident response and service management;
- passenger support during the introduction of new services;
- service optimisation based on operational data and user feedback;
- maintenance during the initial deployment period where bundled in supplier or service contracts;
- monitoring, evaluation and reporting needed to demonstrate SCF outputs and results;
- transition arrangements toward regular post-2032 operation.

Operational expenditure under this block will be limited to what is necessary for deployment and ramp-up of the additional automated services. Existing services remain part of the 2026 baseline and continue to be financed through regular budget lines.

Any operational cost included under the SCF measure must be linked to additional automated service output, the creation of longer-term effects, and the transition towards a sustainable post-2032 operating model.

More details on costs will be presented in the Financing and Costs section.

Scope exclusions

The following activities are excluded from SCF output counting under this measure:

- the Leuven autonomous transport project with larger automated busses;
- the Antwerp Noorderdokken project with smaller automated shuttles;
- earlier demonstrations and pilots with automated vehicles;
- existing De Lijn services;
- existing flex transport services financed through regular budgets;
- non-SCF roadmap projects;
- readiness activities already financed through other funding sources.

Detailed information on the purpose of the measure or investment and who is targeted and what is targeted; an explanation of how the measure and investment would effectively contribute to the achievement of the objectives of the Fund within the overall framework of a Member State's relevant policies, and how it will reduce reliance on fossil fuels

The purpose of the measure is to provide additional, affordable, accessible and available public transport for vulnerable transport users living in, or travelling from, eligible red statistical sectors in Flanders. These are sectors where two vulnerability criteria overlap: weak public transport accessibility and financial vulnerability. The targeting methodology is described in the previous section; for this section, the relevant point is that the measure focuses on users for whom insufficient public transport access creates a structural dependence on fossil-fuelled private car use.

The measure contributes directly to the clean mobility objectives of the Social Climate Fund, which include improving access to zero- and low-emission mobility and transport, incentivising affordable and accessible public transport, and supporting sustainable mobility on demand and shared mobility services. Making transport more affordable, accessible and available for vulnerable transport users is expected to reduce transport poverty and improve access to essential services [SCF Guidance, Introduction / clean mobility]. These objectives cover, among others, affordable and accessible public transport, sustainable mobility on demand, first- and last-mile public transport, on-demand services, mobility hubs, shared mobility services and extension of public transport in underserved rural, urban and suburban areas where they benefit vulnerable transport users [SCF Guidance, Section III.3(g)].

Target beneficiaries

The measure targets vulnerable transport users connected to eligible red statistical sectors, in particular:

- residents of eligible red sectors;
- low-income and lower-middle-income households affected by transport poverty or at risk of transport poverty;
- people without affordable access to a private car;
- people unable to purchase or use cleaner private vehicles;
- people without a driving licence;
- young people, older people and persons with reduced mobility;
- people with care responsibilities or complex trip chains;
- users needing access to work, education, healthcare, shops, public services and other essential destinations.

The final number of eligible red sectors and residents covered will be inserted after validation of the TML/De Lijn map and the final deployment zone selection, in the total Flanders region: 983 eligible red sectors; 448879 residents; 2878.8 km²; 155.9/km² population density. The measure targets additional public transport access for vulnerable users in objectively identified areas where financial vulnerability and poor public transport accessibility coincide.

This targeting is relevant in the Flemish mobility context. The most recent Flemish Travel Behaviour Survey reports that the average Flemish resident makes 2.6 trips per day, travels 29.3 km per day, and that 51.8% of daily trips are still made by car as driver or passenger [OVG 7, 2023-2024]. Where public transport is weak and incomes are low, higher fossil-fuel-based transport costs therefore affect a large part of everyday mobility, including unavoidable journeys to work, education, care and basic services.

What is targeted

The measure targets accessibility gaps and will support service zones that address one or more of the following gaps:

- missing first- and last-mile connections from eligible red sectors to the fixed public transport network;
- weak access to railway stations, mobility hubs, core bus/tram corridors or supplementary network nodes;
- poor access to essential services such as schools, healthcare, shops, employment locations and public services;
- dispersed demand patterns that cannot be efficiently served by fixed-route public transport;
- off-peak or irregular mobility needs where regular public transport is unavailable or insufficient;
- insufficient transfer quality between underserved residential areas and the wider public transport network.

Within the Flemish basic accessibility model, the measure intervenes in the flex transport layer that complements the train, core and supplementary networks. It reinforces this layer by adding automated, zero-emission demand-responsive services to the existing reservation-based offer,

targeted at areas where the standard network does not provide sufficient access for vulnerable users.

Service model

The service model has two layers.

Layer 1: automated demand-responsive feeders

This is the core layer. Small zero-emission automated vehicles provide flexible public transport connections:

- between designated flex stops;
- from eligible red sectors to mobility hubs;
- from residential areas to railway stations, bus/tram corridors or supplementary network nodes;
- from underserved neighbourhoods to essential destinations;
- from red sector origins to the nearest point where the fixed public transport network becomes useful.

This feeder layer addresses the main practical barrier faced by vulnerable users: the lack of a usable connection between their home area and the wider public transport network.

Layer 2: corridor reinforcement where necessary

Larger automated vehicles may operate on selected corridor sections where this is needed to make the feeder service useful. This can be justified where:

- eligible red sectors can be connected to the same corridor or hub;
- the corridor provides access to jobs, schools, healthcare, shops or other essential services;
- existing frequency or capacity is insufficient to provide minimum transfer quality;
- the corridor reinforcement remains proportionate to the red sector accessibility benefit.

This second layer is not a general autonomous bus roll-out. It is an enabling element for targeted demand-responsive public transport. Corridor reinforcement is eligible only where the principal beneficiary logic remains anchored in eligible red sectors.

Contribution to Social Climate Fund objectives

The measure contributes to the objectives of the Fund in five concrete ways.

1. **Improved access to affordable and accessible public transport**
   The measure creates additional public transport connections from eligible red sectors to the existing De Lijn network, hubs and essential destinations. This matches the SCF

Guidance's emphasis on affordable and accessible public transport and public transport extension in underserved areas.

2. **Sustainable mobility on demand and shared mobility**
   The measure funds public, pooled, automated demand-responsive services. This corresponds to the SCF Guidance category of sustainable mobility on demand and shared mobility services. It also follows the Guidance's recommendation to supplement public transport with on-demand services that cover the whole route chain, including the first and last mile.
3. **Reduction of transport poverty**
   The measure targets areas where poor accessibility and low income overlap. It addresses the practical transport-poverty mechanism: vulnerable users face higher fossil-fuel costs while lacking realistic alternatives. By creating additional feeder access, the measure improves the availability of public transport where this is currently weakest.
4. **Improved access to essential services**
   The service zones will be selected and monitored based on their ability to connect eligible red sectors to hubs, corridors and destinations such as work, education, healthcare, shops and public services. This links the measure to the SCF objective of improving access to essential services and to the European Pillar of Social Rights principle on access to good-quality essential services, including transport.
5. **Structural support instead of temporary compensation**
   The measure provides lasting public transport capacity rather than direct income support. Vehicles, charging infrastructure, route validation, software integration, remote-supervision capability, staff training and operational data remain available after 2032. This is consistent with the SCF Guidance requirement that measures and investments create lasting impact and reduce fossil-fuel dependency. [SCF Guidance, Section II.2]

Contribution to Member State and Flemish policy framework

The measure is consistent with the Flemish public transport policy framework because it strengthens flex transport, the layer designed for situations where fixed-route public transport does not provide an adequate solution. It does so through a targeted and additional investment, not by replacing the train, core or supplementary networks. The measure also supports the Flemish transition toward zero-emission and automated public transport, using De Lijn's internal preparation pathway for automated mobility while restricting SCF support to services that meet the Social Climate Fund targeting logic.

The measure is also consistent with De Lijn's autonomous transport preparation work. De Lijn's internal analysis distinguishes between private autonomous vehicles, robotaxis and pooled roboshuttles. It identifies the risk that private autonomous cars and robotaxis generate additional empty kilometres and lower occupancy, while pooled roboshuttles can offer a more efficient and inclusive form of shared mobility. De Lijn's internal assessments show that the average occupancy of a private car is around 1.21 persons, while (shared and public) roboshuttles are modelled with an average occupancy of around 1.5-2 persons and, in large service areas, can offer waiting times of around 3-5 minutes in simulation-based scenarios.

Pass-on of benefits to vulnerable users

The SCF Guidance requires that where support is delivered through public or private intermediaries, statutory or contractual safeguards must ensure that the benefit is passed on to vulnerable households, micro-enterprises or transport users [SCF Guidance, Article 9 / pass-on of

benefits]. In this measure, the benefit is passed on through service availability and affordability, not through direct cash transfers.

The pass-on mechanism consists of:

- **public service integration:** services are integrated into the De Lijn public transport offer rather than offered as private premium mobility;
- **fare integration:** users access the services through the public transport fare system, subject to the applicable De Lijn tariff rules;
- **social tariffs:** existing reduced-fare mechanisms remain relevant, including the annual Buzzy Pazz or Omnipas for persons with increased reimbursement status at EUR 68/year, the Omnipas 65+ at EUR 71/year, and free De Lijn annual passes for eligible persons with disabilities, subject to the applicable rules and MOBIB administration costs
- **targeted availability:** the additional services are deployed in eligible red sectors, not in already well-served or high-income areas;
- **non-digital access safeguards:** where booking is digital, complementary access channels such as telephone booking, customer-service support or assisted booking through mobility hubs should be provided where relevant;
- **contractual safeguards:** suppliers are remunerated through procurement or service contracts; the SCF benefit is delivered through additional service output and affordability, not retained as excess supplier compensation.

Reduction of reliance on fossil fuels

The measure reduces reliance on fossil fuels through the vehicle technology, the service design and the network effect.

- **Vehicle technology:** all vehicles financed under the measure will be zero-emission. No fossil-fuel vehicles are financed.
- **Mode substitution:** the service creates a realistic public transport alternative for users who currently depend on fossil-fuelled private car use because the fixed network is not accessible enough.
- **Feeder integration:** by connecting red sectors to rail, bus, tram and mobility hubs, the measure increases the usefulness of the wider public transport network and reduces the need for car access to reach the first usable public transport node.
- **Pooled operation:** the measure uses shared public transport vehicles rather than private autonomous vehicles or individual robotaxi services. This supports higher occupancy and reduces the risk of additional empty kilometres.
- **Durable operating model:** the investment creates assets and operational capability that can continue after 2032, reducing dependence on recurring fossil-fuel car trips rather than only compensating their cost temporarily.

Description of how the measure or investment is implemented (method of implementation), referring to the administrative capacity of the Member State at central and, where appropriate, regional and local level

The measure will be implemented through the existing Flemish public transport governance structure. MOW acts as accountable authority for the SCF measure, De Lijn acts as the

implementing body and public transport integrator, specialist suppliers provide automated-vehicle and software components (+ maintenance) under public procurement, and transport regions/local authorities validate local service needs. This structure uses existing administrative capacity for public transport planning, procurement, implementation, monitoring and reporting.

The implementation model is based on a clear allocation of responsibilities and a structured delivery process:

- **MOW acts as the accountable authority** for the measure and oversees compliance, eligibility, additionality and reporting.
- **De Lijn acts as the implementing body and public transport integrator**, responsible for procurement, service integration, operational monitoring and data collection. Zero-emission automated vehicles, automated-driving systems, software licences, route mapping, validation, maintenance, charging/service-readiness components, remote-supervision interfaces and related technical support are **procured through transparent procurement procedures and framework contracts.**
- Specialist suppliers provide technical components and operational support where required under contract, while public transport planning, targeting and service accountability remain within the public governance framework.
- Service areas are selected through a clear step-by-step process. Areas must first meet the red sector eligibility criteria, after which they are assessed for accessibility needs, additionality, technical feasibility and cost-effectiveness.
- De Lijn collects operational and financial evidence for monitoring purposes, while MOW validates implementation progress and reports under the Belgian Social Climate Plan framework.

Level	Actor	Main responsibility	Key outputs
Regional authority	MOW	SCF accountability, eligibility, compliance, reporting, additionality control	Eligibility framework, validation decisions, SCF reporting files, audit trail
Public transport implementer	De Lijn	Procurement, service integration, operation/operational integration, remote supervision, data	Procurement files, service orders, operational data, baseline/additionality evidence
Technical delivery	External suppliers	Vehicles, automated-driving systems, software, mapping, validation, maintenance, technical support	Vehicle delivery records, technical files, safety/route-readiness evidence, maintenance/data interfaces
Regional/local validation	Transport regions and local authorities	Local mobility needs, hubs/stops, access to essential services, communication and uptake	Local validation file, stop/hub confirmation, user-access arrangements

Implementation sequence

The measure will follow a staged implementation process from 2027 to 2032.

Period	Implementation focus	Evidence
2027 Q1–Q2	Finalisation of SCF targeting, baseline and KPI framework; confirmation of selected-zone baseline; setup of SCF tracking and reporting structure	Approved methodology framework, selected-zone baseline report, KPI framework, audit-file structure
2027–2028	Procurement or activation of the deployment mechanism for automated vehicles, software, mapping, maintenance, validation, charging/depot readiness and data/reporting requirements, leading to Milestone M1 in 2028	Procurement documents, framework or contract records, technical specifications, SCF traceability provisions
2028	Zone-level service design for Kortrijk–Deinze and Menen–Roeselare, contributing to Milestone M2	Zone design plans, red-sector overlays, before/after accessibility maps, cost files, additionality screening
2028–2029	Technical and operational preparation: route mapping, safety validation, vehicle commissioning, booking/dispatch integration, charging/depot readiness, remote supervision, staff training and passenger information, supporting M2 and preparation for Targets T1 and T2	Route-readiness reports, safety-validation documents, vehicle commissioning records, integration evidence, training records
2029 Q3	**Operational launch of both SCF corridor-feeder zones (corresponding to T1 and T2)***	**Launch records, service maps, vehicle deployment records, operational logs**
2030–2032	Ramp-up, service optimisation, monitoring, reporting and post-2032 continuation planning	Operational data, passenger data, service reports, financial records, monitoring reports, continuation pathway
2032 Q2	Final impact verification	Final milestone and target verification file, updated GIS evidence, modal-shift and CO_2 calculations, audit documentation

*Even though the implementation timeline of both deployments might shift slightly, the ambition is to have both services implemented at the same time.

Procurement and contracting route

The measure will use De Lijn's planned framework contract for automated transport.

De Lijn is expected to launch the tender for the automated-vehicle provider framework in **Q3 2026**, with framework contract signature expected by **Q3 2027**. The framework is intended to cover the provision of all vehicles as required to complete the roadmap, including associated maintenance, software licences and technical support for De Lijn. It is also expected to function as a **central purchasing body** arrangement, allowing structured call-offs for De Lijn and where applicable, additional other eligible public transport or public-sector users. In general, the framework contract will serve two purposes:

1. **De Lijn's wider non-SCF automated transport roadmap**, including first-wave and later roadmap deployments financed outside the Social Climate Fund; and
2. **the two SCF deployment zones**, covering the vehicles, software, maintenance and technical support required for the Kortrijk–Deinze and Menen–Roeselare corridor-feeder services.

This shared framework approach avoids creating a separate procurement route for the SCF measure. It uses De Lijn's broader procurement capacity and market engagement while allowing SCF-funded outputs to be defined through specific call-offs, service orders, project codes and accounting codes.

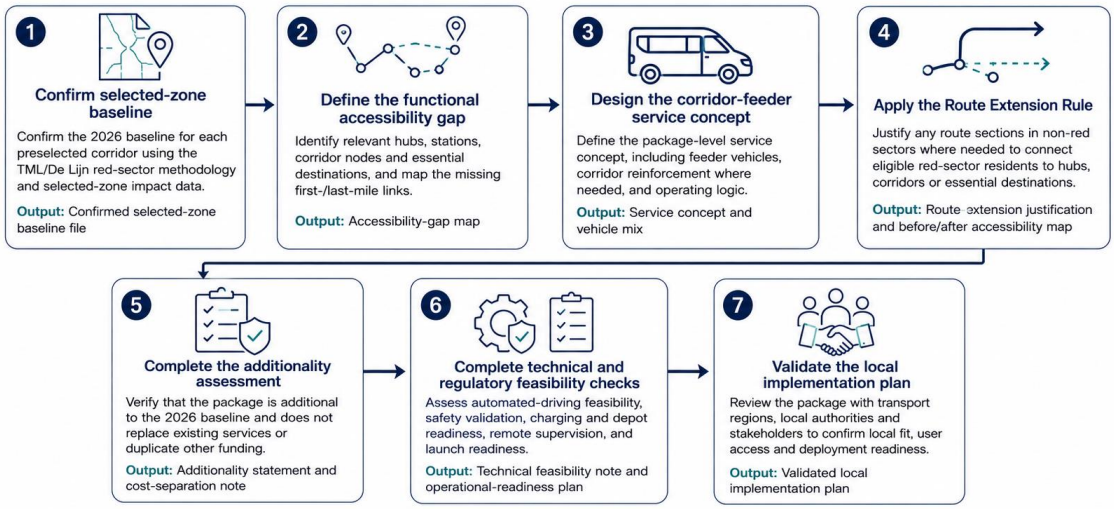
For the SCF measure, the framework will be used to purchase the vehicles and related services needed for the two corridor-feeder deployments. This may include automated zero-emission vehicles, software licences, maintenance, technical support, route mapping, safety validation and monitoring tools.

The framework contract itself is not an SCF output. SCF outputs will only start when specific orders or call-offs are placed for the Kortrijk–Deinze and Menen–Roeselare deployments.

SCF-funded costs and outputs must be clearly separated from De Lijn's other automated transport activities. It must be possible to identify and track SCF-funded vehicles, software, maintenance, route preparation, operating costs and service results.

Corridor-feeder zone finalisation workflow

The two deployment corridors have been preselected. The remaining implementation task is to finalise the operational design of each zone and verify that it remains compliant with the SCF targeting, additionality and feasibility requirements. This will be done through the following workflow.



Step 1: Confirm the selected-zone baseline

For each preselected corridor, the 2026 baseline will be confirmed using the TML/De Lijn red-sector methodology and selected-zone impact data. The baseline file will identify the eligible red sectors, eligible population, existing public transport accessibility, relevant hubs, corridors, essential destinations, car-dependency baseline and CO_2 baseline.

Output: confirmed selected-zone baseline file.

Step 2: Define the functional accessibility gap

For each corridor, De Lijn will assess which hubs, stations, corridor nodes and essential destinations are relevant for the eligible red-sector population. The purpose is to determine which missing first-/last-mile or feeder connections need to be closed.

Destinations may include:

- railway stations;
- mobility hubs;
- bus or tram corridor nodes;
- healthcare facilities;
- education facilities;
- employment hubs;
- shops and basic services;
- other essential public services.

Output: accessibility-gap map showing red-sector origins, relevant destinations and missing links.

Step 3: Design the corridor-feeder service concept

The operational concept will define how smaller automated feeders and larger corridor vehicles are combined.

The design may include:

- automated feeder shuttles only;
- automated feeder shuttles plus limited corridor reinforcement;
- larger automated vehicles on corridor sections where required for frequency, capacity or transfer quality;
- booking, dispatch and passenger-information integration;
- remote-supervision arrangements;
- charging and depot/service-readiness requirements.

The corridor element may be included only where it is functionally necessary to make the feeder service effective for eligible red-sector users.

Output: zone-level service concept, vehicle mix, service area, operating logic and enabling-cost file.

Step 4: Apply the Route Extension Rule

Automated services may cross or operate in non-red sectors where this is necessary to connect eligible red-sector residents to hubs, corridors or essential destinations. In such cases, the eligibility logic remains anchored in the red-sector origin population.

The zone file must show that any route extension:

- is necessary for a functional public transport connection;
- principally benefits eligible red-sector users;
- does not transform the measure into a generic corridor upgrade;
- remains additional to the 2026 baseline.

Output: route-extension justification and before/after accessibility map.

Step 5: Complete the additionality assessment

Each zone will be screened against the 2026 baseline. A zone, route section or cost item will be rejected or revised if it:

- replaces an existing public transport service without material additionality;
- substitutes recurring Flemish or national public transport expenditure;
- primarily benefits non-red sectors;
- cannot demonstrate improved access for eligible red-sector users;
- duplicates costs or outputs financed by another EU or Flemish instrument;
- cannot be separately tracked in the audit trail.

Output: additionality statement, cost-separation note and before/after map.

Step 6: Complete technical and regulatory feasibility checks

Before deployment, each zone will be assessed for automated zero-emission operation within the SCF period.

The feasibility check will cover:

- automated-driving feasibility;
- route complexity and road environment;
- route mapping requirements;
- safety-validation requirements;
- vehicle commissioning;
- charging and depot/service readiness;
- remote-supervision requirements;
- booking and dispatch integration;
- passenger-interface and accessibility requirements;
- data and reporting requirements;

- readiness for launch in 2029 and final verification by Q2 2032.

Output: technical feasibility note and operational-readiness plan.

Step 7: Validate the local implementation plan

Before launch, the zone design will be reviewed with the relevant transport region, local authorities and local stakeholders. This step ensures that the service design corresponds to real access needs and can be implemented locally.

The local validation will cover:

- stops, hubs and transfer points;
- access to essential destinations;
- public-space or charging implications where relevant;
- passenger information;
- booking channels;
- non-digital or assisted access where relevant;
- accessibility and safety considerations;
- communication and uptake during ramp-up;
- feedback arrangements during operation.

Output: validated local implementation plan.

Monitoring, reporting

The measure will use a combined administrative, operational, geospatial and financial reporting. De Lijn collects data; MOW validates and reports.

The audit trail will include:

- TML/De Lijn GIS files identifying eligible red sectors;
- source year, datasets and eligibility thresholds used;
- 2026 baseline inventory of existing services;
- before/after maps showing additional SCF-funded service coverage;
- selection files for each corridor-feeder zone;
- procurement records, framework contracts, service orders and supplier contracts;
- vehicle delivery, commissioning and zero-emission specifications;
- safety-validation and route-readiness documents;
- charging/depot/service-readiness records;

- booking, dispatch, platform and remote-supervision logs;
- operational data: vehicle-km, service hours, passenger journeys, passenger-km, uptime and service availability;
- data on eligible red sectors, hubs and corridor nodes served;
- financial records separating SCF-funded costs from existing baseline expenditure;
- double-funding checks against LIFE LIFT PDA, CAMINO-2, NEXT RIDE and other relevant EU or Flemish instruments;
- milestone and target verification files.

The two milestones will be verified through the call-of the Framework Agreement, and the approved design plans for the two corridor-feeder zones. The two targets will be verified through official service launch reports, vehicle deployment records, operational logs and evidence that the booking and dispatch platform is operational. Result indicators, which include: accessibility, passenger use, vulnerable-user uptake, modal shift, and CO_2 impact, will to be continuously monitored using De Lijn´s operational data, passenger data and monitoring reports.

Administrative capacity and risk controls

The implementation model relies on existing institutions with relevant capacity:

- **MOW:** Flemish mobility policy, eligibility, reporting, compliance and audit capacity;
- **De Lijn:** public transport procurement, network integration, operations, fare/passenger systems, data collection and service monitoring;
- **transport regions/local authorities:** local mobility planning, public-space coordination and user-needs validation;
- **specialist suppliers:** automated-vehicle, software, maintenance, mapping and validation expertise.

The main implementation risks and controls are:

Risk identified	Likelihood / impact	Mitigation measure proposed
Unclear implementing body	Low / High	MOW accountable; De Lijn implementing body and public transport integrator
Unclear De Lijn/supplier role	Low / Medium	Procurement documents define De Lijn accountability and supplier technical responsibilities
Weak targeting	Low / High	TML red sector filter, income/accessibility thresholds and MOW validation
Replacement of existing services	Low / High	2026 baseline, before/after maps and additionality assessment (see step 4 above)
Use of SCF for conventional PT OPEX	Low / High	CAPEX-led cost structure; temporary ramp-up OPEX only; separate cost codes

Unclear fleet requirements	Low / Medium	Zero-emission automated fleet specified in procurement/service orders
Weak output verification	Medium / High	Vehicle records, service launch evidence, operational logs and GIS coverage
Double funding	Low / High	Separate accounting and cross-checks with other EU/Flemish instruments
Weak post-2032 continuity	Medium / Medium	Zone selection includes continuation potential and transition planning

An explanation of how the measure or investment will aim to address gender inequality, where applicable

See section 12 of the Guidance note.

The measure contributes to gender equality and equal opportunities by improving access to affordable, flexible and accessible public transport for groups that are more dependent on public transport and more exposed to mobility-accessibility gaps. This is in line with Section 12 of the SCF Guidance, which asks Member States to explain how measures and investments address gender inequality, promote equal opportunities for all, and mainstream accessibility rights for persons with disabilities.

The measure is relevant from a gender and equal-opportunities perspective for three reasons.

First, access to private car mobility is not equal across all groups. OVG 7 shows that driving licence ownership remains lower among women than men: 82.5% of women aged 18+ have a driving licence, compared with 90.1% of men. The gap is especially relevant for older users: among people aged 65+, 77.0% of women have a driving licence, compared with 94.5% of men [OVG 7, 2023-2024]. Users without a driving licence, without affordable access to a car, or without the means to purchase cleaner private vehicles are more dependent on public transport, shared mobility and local accessibility.

Second, daily mobility needs are **not** lower for women. OVG 7 shows that women and men in Flanders now make almost the same number of trips per day: 2.64 trips/day for women and 2.60 trips/day for men. Women travel shorter distances on average, 25.8 km/day compared with 32.8 km/day for men, but still depend on reliable mobility for work, education, care, shopping, public services and other essential journeys [OVG 7, 2023-2024]. Flexible first- and last-mile services can therefore support users with shorter, local and combined trips that are often difficult to serve through fixed-route public transport alone.

Third, equal opportunities are strongly linked to age, disability and digital accessibility. OVG 7 indicates that 6% to 12% of respondents experience significant or complete limitations in using common transport modes or mobility infrastructure. These difficulties increase with age: among people aged 65+, reported difficulties range from 14% to 32% for access to public transport infrastructure and boarding/alighting, while 24% report difficulties getting in and out of a car and around a quarter experience problems driving a car [OVG 7, 2023-2024]. The measure is therefore relevant not only for women, but also for older people, persons with disabilities or reduced

mobility, young people, low-income households, people without driving licences, people with care responsibilities and people with limited digital access.

Equality considerations will be embedded in service design through the following principles, where relevant and feasible:

- **Targeted deployment:** prioritising areas where financial vulnerability and poor public transport accessibility overlap.
- **Flexible service model:** automated demand-responsive feeders serving off-peak, irregular and dispersed travel needs.
- **Fare integration:** integration with De Lijn tariffs and existing social-fare schemes for eligible users.
- **Non-digital access:** complementary booking channels (e.g. telephone or assisted booking) where needed.
- **Accessibility:** accessibility requirements for vehicles, passenger information, stops and boarding arrangements where technically feasible.
- **Safe access:** consideration of walking access, lighting, transfer quality, waiting areas and passenger information at stops and hubs.
- **Communication and feedback:** clear multi-channel information and user feedback mechanisms.
- **Monitoring:** inclusion of accessibility-related feedback and, where possible, disaggregated data by gender, age, disability or other relevant equality dimensions.

The timeline of the measure or investment; (for support for low-emission vehicles, a timetable for phasing out that support)

Period	Main implementation steps	Main outputs
2026 Q3–Q4	*Launch of De Lijn's automated-vehicle provider framework tender as enabling procurement context before the SCF measure starts.*	*Tender launch evidence; procurement preparation file; draft technical and service requirements.*
2027 Q1–Q2	Formal start of the SCF measure. Finalise the SCF targeting, baseline and KPI framework; confirm the selected-zone baseline for Kortrijk–Deinze and Menen–Roeselare; set up the SCF audit, tracking and reporting structure.	Approved methodology framework; selected-zone baseline report; KPI framework; audit-file structure.

2027 Q3–Q4	Expected signature of the automated-vehicle provider framework contract. Translate the framework into an SCF-ready deployment route by preparing the call-off logic, service-order structure, cost tracking and traceability provisions for the two SCF zones.	Framework contract; call-off preparation file; SCF traceability approach; draft service-order structure.
2028	Develop the zone-level service design for the two preselected corridors. Confirm red-sector overlays, relevant hubs and corridor nodes, essential destinations, before/after accessibility logic, exact operational perimeters, vehicle mix, service logic, additionality checks and zone-level cost files.	Zone design plans; red-sector overlays; before/after accessibility maps; service-area maps; cost files; additionality screening.
2028–2029	Prepare technical and operational deployment. Complete route mapping, safety validation, vehicle commissioning, booking and dispatch integration, charging/depot readiness, remote supervision arrangements, staff training, passenger information and local implementation validation.	Route-readiness reports; safety-validation documents; vehicle commissioning records; platform/OCC integration evidence; charging/depot-readiness records; staff training records; local validation files.
2029 Q2	Launch both SCF corridor-feeder zones. Zone 1 will enter operation in the Kortrijk–Deinze corridor and zone 2 in the Menen–Roeselare corridor.	Launch records; service maps; vehicle deployment records; operational logs; initial accessibility evidence.
2030	Ramp up service delivery during the first year of operation. Monitor operational performance, service availability, passenger uptake, vulnerable/red-sector user reach, reliability, transfer quality and early accessibility effects. Optimise the service design where needed within the approved SCF zone logic.	Operational data; service-hour or vehicle-km records; passenger data; user feedback; monitoring reports; updated service optimisation files.
2031 Q1	Verify the first full operating year of both SCF zones. Confirm actual service output, passenger use, vulnerable-user uptake, reliability, availability and first modal-shift estimates.	First full operating-year verification file; operational data; passenger and service-output reports; initial modal-shift estimate.
2031–Q2 2032	Continue optimisation, monitoring and final impact preparation. Complete before/after GIS accessibility analysis, final modal-shift and CO_2 calculations, financial/audit documentation and post-2032 continuation planning.	Updated GIS evidence; monitoring reports; financial records; modal-shift and CO_2 calculation files; continuation pathway.
2032 Q2	Final impact verification. Confirm achievement of the final deployment, accessibility, vulnerable-user uptake, modal-shift and climate-impact targets. Prepare the final verification file for MOW and Belgian Social Climate Plan reporting.	Final milestone and target verification file; final GIS coverage maps; final operational data; final financial/audit records; final CO_2 impact calculation; post-2032 continuation pathway.

After Q2 2032	No further target-critical deployment activity will be scheduled under this measure. Any continuation, expansion or regular operation beyond the verified SCF deployment will be decided and financed through regular Flemish and De Lijn planning and budgeting processes, outside the SCF target framework.	SCF closure documentation; continuation decision where applicable; no further SCF target claims.

The timeline follows four implementation phases.

Phase 1: Framework and baseline confirmation, 2027
This phase fixes the SCF eligibility logic, selected-zone baseline, KPI framework and audit structure. It ensures that the two deployment zones are measured against a clear 2026 baseline before service design and procurement call-offs are activated.

Phase 2: Procurement activation and zone design, 2027–2028
This phase connects the measure to De Lijn's automated-vehicle framework contract and translates the two preselected corridors into detailed corridor-feeder zone designs. The focus is on service areas, feeder/corridor logic, red-sector coverage, hubs, essential destinations, additionality and cost traceability.

Phase 3: Technical preparation and launch, 2028–2029
This phase covers the practical readiness steps required for automated public transport: route mapping, safety validation, vehicle commissioning, charging/depot readiness, booking and dispatch integration, remote supervision, staff training and passenger information. Both SCF zones are planned to enter operation in **Q3 2029**.

Phase 4: Ramp-up, monitoring and final verification, 2030–Q2 2032
This phase verifies that the services deliver usable public transport access for the intended target group. It covers service optimisation, operational monitoring, passenger and user data, before/after accessibility assessment, modal-shift estimation, CO_2 calculation and the post-2032 continuation pathway.

By Q2 2032, the two SCF deployment zones must be operational, the final accessibility and service-output indicators must be verified, the modal-shift and CO_2 calculations must be completed, and the post-2032 continuation pathway must be adopted. This timing leaves sufficient time for verification and reporting before the end of the SCF implementation period.

Timetable for phasing out support for low-emission vehicles and operating support

As the measure exclusively supports zero-emission automated public transport vehicles, no separate phase-out schedule is required for low-emission technologies. The measure does not provide support for fossil-fuel vehicles, hybrid vehicles or other transitional vehicle categories.

The only phase-out element concerns the temporary operational support provided during the deployment and market-maturation phase of automated services. This support is intended to facilitate the introduction of a new mobility model and to generate the evidence, operational experience and user uptake needed for longer-term integration into the public transport system. It is therefore limited in duration and linked to the SCF implementation period.

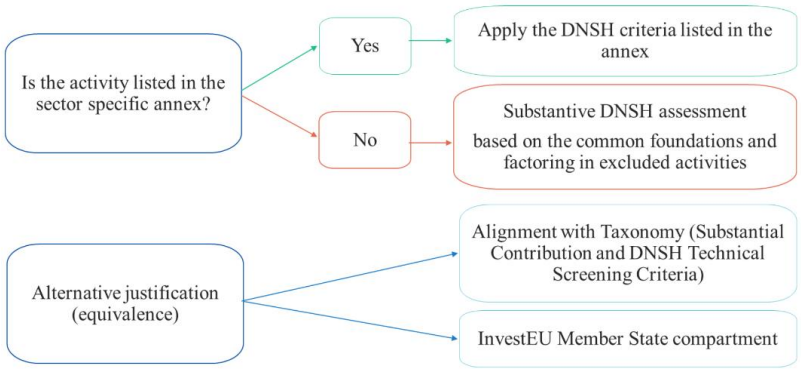
From Q2 2032 onwards, no new SCF support will be available for vehicle acquisition, commissioning, operational readiness or service operation. Any continuation of services beyond the fund period will be subject to the normal planning, budgeting and decision-making processes of the Flemish public transport system and will be financed outside the SCF framework. This ensures that SCF support remains temporary and catalytic, while creating lasting accessibility benefits for vulnerable households in the targeted areas.

'Do no significant harm' (Do No Significant Harm)

Any measure MUST comply with this principle, otherwise it will be removed.
Demonstrating whether a measure is sufficient can be done in two ways:

- The measure appears in the exhaustive list annexed to the DNSH guidance.
- Otherwise, an assessment must be carried out on the basis of which it is demonstrated that the measure is satisfactory.

If the measure is not listed in annex, please contact roel.vermeiren@vlaanderen.be for further support with the DNSH assessment.



Information on how the measures and investments included in the component comply with the principle of 'do no significant harm' within the meaning of Article 17 of Regulation (EU) 2020/852.
For further explanation: see Do No Significant Harm Guidance + annex

The measure complies with the DNSH principle. It supports only zero-emission automated public transport vehicles and directly necessary enabling investments. No fossil-fuel vehicles, hybrid vehicles or fossil-fuel infrastructure will be financed. DNSH compliance will be demonstrated through the applicable SCF DNSH annex category or, where required, through a specific DNSH assessment. Relevant DNSH, tyre and sustainability/resilience requirements will be included in procurement documents.

Milestones, targets and timeline HIGHLIGHT IMPORTANT

More explanation on milestones and targets: see section 6 of the Guidance note

The formulation of clear milestones and targets is essential in the assessment of the measure. Note that the disbursement of SCF funds is fully linked to the achievement of milestones and targets. Several milestones and targets may be included per measure

Information on each milestone and target that will reflect progress in the implementation of measures and investments of this component, as follows:

Milestones, targets and timeline

Milestone: call-off framework agreement and two SCF automated corridor-feeder designs

Milestone 1: Call-off framework agreement for proposal for 17 smaller automated vehicles and 6 larger automated vehicles

By Q4 2028, De Lijn will call-off 17 smaller automated vehicles and 6 larger automated vehicles (using their framework agreement with an AV supplier, as explained on page 20) for the two SCF corridor-feeder zones.

The milestone verifies that the procurement for the 2 SCF zones has been finalised. This procurement will cover the supply of zero-emission automated vehicles, automated-driving systems, software and licences, mapping, safety validation, maintenance, charging or depot readiness, and remote supervision.

The achievement of the milestone will be confirmed by the documents of the published cal-off for proposal, which will be dated and formally approved by De Lijn.

Milestone 2: Approved design plans for 2 corridor-feeder zones

By Q4 2029, the design plans for the 2 automated corridor-feeder deployment zones will be approved.

This milestone demonstrates that the 2 corridor-feeder zones have been fully designed, validated and approved for implementation. The approved design plans will confirm the service concept, target areas, accessibility benefits, additionality, technical feasibility, and operational readiness of both deployment zones.

The fulfilment of the milestone will be assessed based on the approved design plans for the 2 zones. The plans will define the service area, red-sector overlay maps, before-and-after accessibility maps, feeder and corridor logic, stops or access points, hubs and corridor nodes, additionality screening, technical feasibility assessment, local validation, and cost plan.

Target: two new automated demand-responsive mobility services

Description

Target 1: New automated demand-responsive mobility service in Kortrijk-Deinze

By Q4 2030, the automated demand-responsive mobility service in Kortrijk-Deinze will be operational in the dedicated corridor-feeder zone.

Achievement of the target will be demonstrated through an official service launch report from De Lijn. This report will contain vehicle deployment records, operational records and evidence that passengers can book the service through the relevant booking and dispatch platform.

Target 2: New automated demand-responsive mobility service in Menen-Roeselare

By Q4 2030, the automated demand-responsive mobility service in Menen-Roeselare will be operational in the other corridor-feeder zone.

Achievement of the target will be demonstrated through an official service launch report from De Lijn. This report will contain vehicle deployment records, operational records and evidence that passengers can book the service through the relevant booking and dispatch platform.

For both mobility services, the accessibility, passenger journeys, vulnerable-user uptake, service availability, modal shift and CO_2 impact will continue to be monitored throughout implementation. These indicators support the assessment of the performance and impact of the measure but do not constitute separate formal SCF milestones or targets.

Note: Both services are planned to be launched in parallel. However, during implementation, one target may be achieved before the other.

Table with information on milestones, targets and timeline for the achievement of the measure/investment

Number	Measure/Investment	Milestone/Purpose	Milestone/target name	Quantitative indicator (target)			Timeline for performance	
				Unit of measure/investment	Baseline	Target	Year	Quarter
1		Milestone	Call-off framework agreement for proposal for 17 smaller automated vehicles and 6 larger automated vehicles	n/a	n/a	n/a	2028	Q4
2		Milestone	Approved design plans for 2 corridor-feeder zones	n/a	n/a	n/a	2029	Q4
3		Target	New automated demand-responsive mobility service in Kortrijk-Deinze	# of services implemented	0	1	2030	Q4
4		Target	New automated demand-responsive mobility service in Menen-Roeselare	# of services implemented	1	2	2030	Q4

Why the specific milestone (s) or objective (s) was/were chosen

These milestones and targets were chosen to create a clear performance chain from procurement and service design to the actual operational deployment.

The first milestone confirms that the procurement process for the automated vehicles and associated systems needed for the two SCF services has been launched. This is a concrete and objective verifiable step towards implementation.

The second milestone confirms that both corridor-feeder zones have been fully designed, validated and approved for implementation. This ensures that the service concept, target areas, additionality, technical feasibility and operational requirements are defined before deployment.

The two targets then measure the actual deployment. The first target confirms that one additional automated demand-responsive mobility service is operational by Q4 2030. The second target confirms that both additional automated demand-responsive mobility services are operational by Q2 2032.

The measure will also monitor accessibility, vulnerable-user uptake, passenger use, service performance, modal shift and CO_2 impact. These indicators provide evidence on the social and climate performance of the measure.

What the milestone (s) or indicator (s)/target (s) is/are measuring

The milestones and targets measure 2 different types of progress: implementation readiness, operational delivery and final impact.

1. Implementation readiness

The milestones measure whether the measure has reached the conditions needed for safe, targeted and auditable deployment. They verify that:

- The call for proposal for 17 smaller automated vehicles and 6 larger automated vehiles has been published.
- The design plans for the 2 corridor-feeder zones have been approved.

This means that the milestones measure concrete preparation steps required before the services can be actually deployed.

2. Operational delivery

The targets measure whether the two SCF services enter real public transport operation. They measure:

- Whether 1 additional automated demand-responsive mobility service is operational by Q4 2030.
- Whether 2 additional automated demand-responsive mobility services are operational by Q2 2032.

These targets measure the direct operational outputs financed by the SCF: the deployment of 2 additional automated demand-responsive mobility services.

Existing services, previous pilots, roadmap projects outside the SCF and preparatory activities financed elsewhere are excluded.

3. Supporting monitoring indicators

In addition to the formal milestones and targets, the SCF measure will continue to monitor accessibility, passenger journeys, vulnerable or red-sector user uptake, service availability and reliability, modal shift and CO2 impact. These indicators will be used to assess the wider social and climate performance of the measure, but they do not represent a separate formal SCF milestone or target.

Together, the indicators measure whether the SCF investment has moved from targeted preparation to operational service, from service availability to vulnerable-user access, and from access improvement to measurable social and climate impact.

What methodology and source will be used, and how the correct achievement of the milestone (s) or objective (s) will be objectively verified

Milestone 1: *Published call for proposal for 17 smaller automated vehicles and 6 larger automated vehicles*

The first milestone verifies that the procurement mechanism for the 2 SCF zones is in place. De Lijn will prepare and publish the public procurement procedure in compliance with the applicable EU and Belgian public procurement framework. The procurement will cover the supply of zero-emission automated vehicles, automated driving systems, software and licenses, mapping, safety validation, maintenance, charging or depot readiness, remote supervision, operational data management and reporting requirements.

The achievement of the milestone will be confirmed by the **documents of the call for proposal**, which are dated and signed by De Lijn.

Milestone 2: Approved design plans for the 2 corridor-feeder zones

The second milestone demonstrates that the two corridor-feeder zones have been fully designed, validated and approved for implementation. The approved design plans confirm the service concept, target areas, accessibility benefits, additionality, technical feasibility and operational readiness of both deployment zones.

The fulfilment of the milestone will be assessed based on the **design plans** for the two automated corridor-feeder deployment zones in the preselected corridors (Zone 1: Kortrijk–Deinze and Zone 2: Menen–Roeselare).

The design plans define and depict the service area, red-sector overlay maps, before-and-after accessibility maps, feeder and corridor logic, stops or access points, hubs and corridor nodes, additionality screening, technical feasibility assessment, local validation, cost plan and zone-specific KPI targets.

Target 1 and 2: Additional automated demand-responsive mobility services

The first and only target verifies that the two additional automated demand-responsive mobility services are deployed in the 2 corridor-feeder zones. This also includes the operation of the digital platform, which households can use to book a ride. The following elements will confirm the achievement of the target:

- An **official launch report** by De Lijn, to prove that the mobility services have entered operation in the 2 corridor-feeder zones;
- The purchase and deployment of the automated vehicles will be proved by vehicle **deployment records**, documenting the routes, the usage and operational deployment of the automated vehicles

The usage of the digital platform will be explained with a **demonstration** of the tool and next to go-live **certificates/test reports**, proving that households can book automated mobility services through the online platform.

The measure will use four complementary verification methods: administrative verification, GIS-based accessibility analysis, operational data analysis and financial/audit verification. De Lijn will collect and structure the evidence. MOW will validate the evidence for reporting under the Social Climate Plan.

1. Targeting and baseline methodology

The targeting and baseline methodology will use the TML/De Lijn red sector analysis, combined with the selected-zone baseline for the Kortrijk-Deinze and Menen-Roeselare corridors.

The baseline will be fixed before deployment and will include:

- the eligible low-income or red sector population;
- existing public transport accessibility;
- acceptable travel-time access to essential destinations;
- relevant fossil-fuel car travel;

- baseline CO_2 emissions;
- existing hubs, corridors and essential destinations.

The accessibility baseline and target will be calculated through GIS analysis. The key accessibility indicator is the number and share of eligible residents who gain usable public transport access within the agreed acceptable travel-time thresholds. Usable access means that the resident can access the A-DRT/corridor-feeder service and reach relevant hubs, corridors or essential destinations within the defined travel-time threshold.

The travel-time thresholds are:

- daily/basic destinations, including GP, pharmacy, shops and train station: approximately 20 minutes;
- hospital and employment hub: approximately 45 minutes.

Achievement will be verified through before/after GIS maps, travel-time calculations, service maps, stop or access-point locations, hub/corridor connections and the final selected-zone monitoring file.

2. Milestone verification

Milestones will be verified through documentary evidence.

Relevant sources may include:

- approved MOW/De Lijn methodology notes;
- selected-zone baseline report;
- GIS datasets and red sector overlay maps;
- procurement or framework records;
- technical specifications;
- zone design plans;
- additionality screening files;
- local validation evidence;
- route-readiness reports;
- safety-validation documentation;
- vehicle commissioning records;
- charging/depot-readiness records;
- booking and dispatch integration evidence;
- remote-supervision readiness evidence;
- staff training records;
- operating procedures.

A milestone will be considered achieved only when the required evidence is complete, dated, traceable and validated by the responsible authority.

3. Operational target verification

Operational targets will be verified through De Lijn service and fleet data.

Relevant sources may include:

- service launch records;
- vehicle deployment and commissioning records;
- operational service maps;
- booking and dispatch data;
- service-hour records;
- vehicle-kilometre records;
- passenger counts;
- passenger-kilometre data, where available;
- reliability and service-availability data;
- user data where available and compliant with data protection rules;
- monitoring reports;
- financial records and invoices.

The first full operating-year target will use actual operational data from both SCF zones. Passenger journeys will be reported as a result indicator, alongside service output, red sector/vulnerable-user uptake, service availability and reliability.

4. Modal-shift and CO_2 methodology

The modal-shift and CO_2 methodology will follow a conservative and auditable calculation logic. Only shifts that can credibly be attributed to the SCF-supported services will be counted.

The 2026 baseline for the selected corridors estimates relevant fossil-fuel car travel as follows:

Total annual car passenger-km = average annual km travelled by car * average car occupancy * eligible population within scope * car ownership rate

Using the current working assumptions:

15,000 km * 1.21 passengers * (38,577 × 0.888) = 621.75 million car passenger-km/year

This figure represents the relevant baseline volume of fossil-fuel car travel linked to the target corridors, hubs or essential destinations.

After deployment, avoided fossil-fuel car travel will be estimated using the SCF service output. The current working assumptions are:

- average annual kilometres travelled per smaller automated vehicle: 50,000 km;
- average annual kilometres travelled per larger automated vehicle: 50,000 km;
- average passengers per smaller automated vehicle: 1.53 (based on De Lijn's internal estimations);
- average passengers per larger automated vehicle: 13 (based on De Lijn's internal estimations);
- smaller automated vehicles deployed: 17;
- larger automated vehicles deployed: 6.

The annual service passenger-kilometres are calculated as follows:

Smaller AV annual service p-km = 50,000 km * 1.53 passengers * 17 vehicles = 1.3 million p-km/year

Larger AV annual service p-km = 50,000 km * 13 passengers * 6 vehicles = 3.9 million p-km/year

Total annual SCF service p-km = 1.3 + 3.9 = 5.2 million p-km/year

The avoided fossil-fuel car travel will then be calculated using an attribution factor:

Avoided fossil-fuel car p-km = SCF service p-km * modal-shift attribution factor

Where De Lijn or survey data show that all relevant SCF service p-km replace fossil-fuel private-car use, the attribution factor may be 100%. Where the evidence is less certain, a conservative lower factor will be used.

CO_2 savings will be calculated as:

CO_2 savings = avoided fossil-fuel car p-km * agreed car emission factor

Using the current working emission factor:

5.2 million p-km * 170 gCO_2e/p-km[2] = 884 tCO_2e/year

This value is a working estimate and will be updated once the final modal-shift attribution factor, operational assumptions and emission factor are validated.

The zero-emission operation of the SCF services will be documented separately through vehicle tracking data, electricity consumption data and operational logs. Any electricity-related emissions, if required by the agreed methodology, will be reported transparently and separately.

5. No-double-counting

A KPI workbook or audit register will be maintained for both SCF zones, documenting KPI definitions, formulas, data sources, assumptions, attribution factors and verification evidence.

Double counting with other EU-funded activities, existing De Lijn services or non-SCF projects will not be permitted.

Where data are uncertain, conservative assumptions will be applied and documented.

What is the baseline (starting point) and what is the level or specific point to be achieved (only for indicators/targets)

The measure uses two complementary baselines: an **SCF output baseline** and a **selected-zone impact baseline**.

1. SCF output baseline

For SCF-funded automated corridor-feeder services, the output baseline is zero.

This means:

- 0 SCF-funded automated corridor-feeder deployment zones;
- 0 SCF-funded larger automated vehicles;
- 0 SCF-funded smaller automated vehicles;
- 0 SCF-supported automated service hours or vehicle-kilometres;
- 0 SCF-supported passenger journeys;
- 0 SCF-funded automated services counted as serving eligible red sectors.

This baseline ensures that existing services and already funded roadmap activities are not counted as SCF achievements. Existing De Lijn services, existing flextransport, the Leuven autonomous fixed-route project, Antwerp Noorderdokken and other non-SCF preparation activities remain part of the baseline and readiness context. They are not counted towards the SCF targets.

2. Selected-zone impact baseline

The selected-zone impact baseline is the 2026 starting point for the two SCF deployment corridors. It measures the accessibility, mobility and climate situation that the SCF zones are designed to improve.

The 2026 baseline is:

- 38,577 eligible low-income or red sector residents living within the Kortrijk-Deinze and Menen-Roeselare corridors;
- 0 eligible residents with usable public transport access under the SCF/red zone accessibility definition;
- no usable public transport connection within the acceptable travel-time threshold;
- 621.75 million relevant annual fossil-fuel private-car travel kilometres linked to the target corridors, hubs or essential destinations;
- 105.7 $ktCO_2e$/year baseline emissions from relevant fossil-fuel car trips.

The “0 eligible residents with usable public transport access” baseline is defined under the SCF/red zone accessibility methodology. It does not mean that no transport infrastructure exists in the wider corridors. It means that the existing public transport offer does not provide a usable connection from the selected red zone areas to the relevant hubs, corridors or essential destinations within the defined acceptable travel-time thresholds.

3. Target level at service launch in 2029

By Q3 2029, both SCF deployment zones shall enter operation. At launch, the target level is:

- 2 SCF automated corridor-feeder zones operational;
- 17 smaller automated vehicles deployed;
- 6 larger automated vehicles deployed;
- 38577 eligible low-income or red sector residents gaining usable public transport access within the acceptable travel-time threshold.

The launch target measures the transition from zero SCF-supported automated services to operational public transport services in the selected corridors.

4. Target level after the first full operating year

After the first full operating year, the target is to verify that both services deliver measurable public transport output and reach the intended users. The target level shall include:

- 1.34 Mio annual zero-emission vehicle-kilometres;
- preliminary estimate of 5.2 Mio avoided fossil-fuel private-car travel kilometres;
- preliminary estimate of 884 tCO_2e avoided.

This target checks whether the services move beyond formal launch and deliver usable, reliable and measurable public transport output.

5. Target level by Q2 2032

By Q2 2032, the full SCF-supported deployment shall be completed and verified. The target level is:

- 2 SCF zones operational;
- 6 larger automated vehicles deployed;
- 17 smaller automated vehicles deployed;
- 38,577 eligible residents gaining usable public transport access within the acceptable travel-time threshold;
- 2642.45 Mio relevant annual fossil-fuel private-car travel kilometres avoided from the 2029 launch;
- 3757 tCO_2e/year avoided compared with the 2026 baseline from 2029 launch;
- post-2032 continuation pathway adopted by MOW and De Lijn.

The final target values for avoided private-car travel and CO_2 savings are still being calculated. They will be inserted once the modal-shift attribution factor, operational assumptions and emission factor have been validated.

The same baseline and calculation method will be used for target-setting and final achievement verification. This ensures that the final impact is measured against the original selected-zone baseline and not against a revised or less demanding reference point.

By when the last milestone (s) or target (s) will be reached (quarterly and yearly)

The final target will be reached by **Q2 2032**. This timing has been chosen to allow sufficient time for final verification before the end of the SCF period. By Q2 2032, the two SCF deployment zones must be operational, the final accessibility and service-output indicators must be verified, the modal-shift and CO_2 calculations must be completed, and the post-2032 continuation must be adopted.

The timing also avoids relying on outcomes generated at the very end of 2032. The period between operational launch in Q3 2029 and final verification in Q2 2032 allows the services to complete a ramp-up phase, generate operational and passenger data, demonstrate accessibility improvements, and provide a credible basis for estimating avoided fossil-fuel car use and CO_2 savings.

The intermediate verification point after the first full operating year will provide early evidence on service output, uptake, reliability and initial modal-shift effects. The final Q2 2032 verification will then confirm the full deployment and final impact indicators.

After Q2 2032, no further target-critical deployment activity will be scheduled under this measure. Any continuation, expansion or regular operation beyond the verified SCF deployment will be decided and financed through regular Flemish and De Lijn planning and budgeting processes, outside the SCF target framework.

Who and which institution will be responsible for implementation, measurement and reporting

1. Flemish Department of Mobility and Public Works (MOW): Accountability and reporting

The **Flemish Department of Mobility and Public Works (MOW)** will serve as the accountable authority for the measure within the Belgian Social Climate Plan framework. MOW will be responsible for:

- Validating the targeting methodology;
- Approving the eligibility and additionality framework;
- Overseeing compliance with Social Climate Fund (SCF) requirements;
- Coordinating audit and reporting obligations;
- Validating the achievement of milestones and targets; and
- Submitting reporting under the Social Climate Plan.

2. De Lijn: Implementation and measurement

De Lijn will act as the implementing body and public transport integrator. Its implementation responsibilities will include:

- Procurement of vehicles and services;
- Service design and deployment;
- Operational integration of autonomous transport services;
- Fare and passenger-information integration;
- Implementation of the two SCF deployment zones;
- Organisation of the operational model, including remote supervision arrangements;
- Booking and dispatch integration;
- Vehicle commissioning;
- Service monitoring; and
- Operational reporting.

De Lijn will also be responsible for collecting, managing and structuring the evidence required for monitoring and reporting. This evidence will include:

- Procurement records;
- Vehicle deployment data;
- Route-readiness and safety-validation documentation;

- Service maps;
- Booking and dispatch data;
- Service hours and vehicle-kilometres;
- Passenger and user data, where available and compliant with data protection requirements;
- Financial records; and
- Monitoring information related to accessibility, uptake by vulnerable users, modal shift and CO_2 impacts.

To ensure auditability, De Lijn will maintain a KPI workbook or equivalent audit register containing:

- KPI definitions and formulas;
- Assumptions and methodologies;
- Data sources;
- Change logs; and
- Controls to prevent double counting.

3. Suppliers and Technology Providers: Technical delivery and data provision

Specialised **suppliers and technology providers** will support technical delivery through public procurement procedures or framework contracts.

Depending on the contract scope, responsibilities may include:

- Delivery of vehicles;
- Provision of automated-driving systems;
- Software development and maintenance;
- Route mapping;
- Safety-validation support;
- Charging infrastructure or depot-readiness support; and
- Provision of technical and operational data.

Contracts will include specific data-sharing and reporting obligations to enable De Lijn and MOW to verify the achievement of milestones and targets.

4. Transport regions, local authorities and other local actors: Local validation and uptake

Transport regions, local authorities and other local actors will support the local validation and deployment process. Their role may include:

- Confirming local mobility needs;
- Supporting stop and hub planning;
- Identifying essential destinations and service priorities;
- Facilitating local communication and stakeholder engagement; and
- Supporting user uptake and awareness.

These actors will not be responsible for formal SCF reporting. However, their validation inputs and supporting evidence may be incorporated into deployment-selection and monitoring documentation.

Financing and Costs

Information and explanation on the estimated total cost of the component and for each measure and investment, with appropriate justification, including:

The methodology used, the underlying assumptions (e.g. on unit costs, cost of inputs) and the justification of these assumptions

The estimated cost of this measure has been developed using a bottom-up costing methodology tailored to the specific design of the intervention as an automated corridor-feeder public transport measure, targeted at vulnerable and underserved areas, rather than using a generic cost-per-passenger benchmark or an average international autonomous transport reference. The costing logic starts from the operational structure of the measure, namely 2 additional automated, zero-emission corridor-feeder deployment zones selected through identified red sectors, and then builds the estimate from the concrete cost items required to make those zones operational.

The cost estimate is therefore based on the expected combination of: (i) the number of corridor-feeder zones to be financed, (ii) the number and type of automated vehicles required in each zone, (iii) the enabling systems and infrastructure needed to operate those vehicles safely and as part of the De Lijn public transport system, and (iv) the temporary ramp-up operating costs needed to bring the services into operation and stabilise them during the SCF period. This approach is consistent with the SCF Guidance, which asks Member States to provide the methodology used, the underlying assumptions on unit costs and inputs, and a calculation showing how the final estimate was obtained.

The estimate is structured around two main cost blocks. Cost Block A covers CAPEX and enabling investment, including 17 automated shuttles, 6 larger automated vehicles where corridor reinforcement is necessary, automated-driving systems, software setup and licences, booking/dispatch/platform integration, remote-supervision and OCC readiness, route mapping, safety validation, charging infrastructure, depot or service-readiness adaptations, vehicle commissioning, and monitoring systems. Cost Block B covers time-limited operational ramp-up costs, including initial operations, supervision ramp-up, staff training, passenger support, service optimisation, bundled maintenance where applicable, and monitoring, evaluation and reporting. The main underlying assumptions are as follows:

On-demand shuttle components (in millions of EUR)

Cost item	Category	Total (2027-2032)	Main components
Startup investment	Capex	1.26	Initial supplier mobilisation, operations-control-centre setup, vehicle safety assessments, route mapping and high-definition mapping.
17 Smaller automated on-demand shuttles providing feeder connections (approx.. €237.000 per vehicle)	CAPEX	4.03	Purchase of vehicles and required software licences and automated-driving platform costs;
Supporting physical infrastructure	Capex	3.57	Charging stations directly linked to the automated zero-emission fleet, light depot or service-readiness adaptations necessary for deployment and bus stop interfaces
Supporting digital infrastructure	CAPEX	0.27	booking, dispatch and passenger-interface integration with De Lijn systems;
Service operations	Opex	12.15	Transport services provided by supplier
Maintenance	Opex	0.56	Maintenance during the initial deployment period where bundled in supplier or service contracts;
Insurance	OPEX	0.55	Insurance costs related to vehicles
Datacommunication	OPEX	0.38	monitoring, evaluation and reporting needed to demonstrate SCF outputs and results;
Project management	OPEX	0.22	Coordination of project overall
Stewards	OPEX	2.61	On board safety operators providing passenger support during the introduction of new services;
Supervision staff	OPEX	3.76	Operational staffing for remote vehicle supervision and the operations control centre during deployment and service operation.
First line support teams	OPEX	0.21	Field operators who support operations on the ground including incident management.
Total		29.58	

Corridor bus components (in millions of EUR)

Cost item	Category	Total (2027-2032)	Main components
Startup investment	Capex	0.29	Initial supplier mobilisation, operations-control-centre setup, vehicle safety assessments, route mapping and high-definition mapping.
6 Larger automated buses serving selected corridor sections (aptimeprox. €423.000 per vehicle)	CAPEX	2.54	Purchase of vehicles and required software licences and automated-driving platform costs;
Supporting physical infrastructure	Capex	1.06	Charging stations directly linked to the automated zero-emission fleet, light depot or service-readiness adaptations necessary for deployment and bus stop interfaces
Supporting digital infrastructure	CAPEX	0.08	booking, dispatch and passenger-interface integration with De Lijn systems;
Service operations	Opex	4.97	Transport services provided by supplier
Maintenance	Opex	0.24	Maintenance during the initial deployment period where bundled in supplier or service contracts;
Insurance	OPEX	0.23	Insurance costs related to vehicles
Datacommunication	OPEX	0.09	monitoring, evaluation and reporting needed to demonstrate SCF outputs and results;
Project management	OPEX	0.07	Coordination of project overall
Legal and buying support	OPEX	0.06	
Stewards	OPEX	0.35	On board safety operators providing passenger support during the introduction of new services;
Supervision staff	OPEX	1.97	Operational staffing for remote vehicle supervision and the operations control centre during deployment and service operation.
First line support teams	OPEX	0.17	Field operators who support operations on the ground including incident management.
Total		12.12	

Overview (in millions of EUR):

	On demand	Corridor	Total:

CAPEX	9.13	3.97	13.10
OPEX	20.45	8.15	28.60
Total:	29.58	12.12	41.70

The costs for the vehicles include vehicle acquisition, associated software licences and automated-driving platform costs. The per-vehicle amounts are indicative averages calculated from the rounded fleet-level budget allocations. They therefore describe the combined vehicle-and-software package, rather than a hardware-only purchase price.

All assumptions are justified by the nature of the measure. The intervention does not finance a conventional extension of fixed-route services, but a more complex public transport deployment model in which socially targeted automated feeder services must be operationally integrated with the existing De Lijn network and fare system and must meet technical, safety, supervision and service-readiness requirements before launch. This means that a significant share of costs is driven not only by vehicles themselves but also by route preparation, validation, digital integration, charging and depot readiness, and the supervisory capability needed for safe public deployment.

The estimated budget comprises EUR 13.10 million in capital and enabling investment and EUR 28.60 million in operating expenditure, representing approximately 31.4% and 68.6% of the EUR 41.70 million total respectively. Capital expenditure establishes the vehicles, infrastructure and systems required for deployment, while SCF-supported operating expenditure covers the time-limited introduction, ramp-up and stabilisation of the additional services. This is important because the SCF Guidance states that, as a rule, the Fund should not substitute recurrent national budgetary expenditure, but that duly justified operating costs may be financed where they are integral to a measure, have longer-term effects, and are sustainably ensured after the Fund ends [SCF Guidance, Section III.8 / Operational costs]. In this measure, temporary ramp-up OPEX is justified because it is directly linked to bringing new automated public transport capacity into service and to establishing a durable operational model that remains available after 2032.

The evidence base for the assumptions consists of De Lijn procurement estimates, supplier market input, existing flextransport cost data, De Lijn automated-transport financial modelling, and comparable deployment evidence where such comparisons are relevant and sufficiently robust. This is in line with the SCF Guidance, which indicates that cost estimates should be based on accounting methods, historic costs, statistical data, credible studies, market prices or similar evidence, and that comparative data from similar measures may be used where available [SCF Guidance, Section III.7(a) / Cost estimates of measures and investments]. Where detailed supplier or procurement data are commercially sensitive, the supporting evidence can be retained in the underlying cost file and, where appropriate, shared separately with the Commission services.

De Lijn’s existing two-shuttle pilot in Leuven, described under “Relationship with De Lijn’s wider automated transport roadmap”, provides practical experience with safety validation, supervision, passenger communication and integration into the public transport network. This provides operational context for the start-up, supervision and passenger-support activities included in the SCF budget. The pilot’s available interim evaluation also provides evidence on passenger acceptance and service usability.

The justification for the overall cost level rests on four elements. First, the measure creates new zero-emission public transport assets and service capability above the 2026 baseline in targeted vulnerable areas, rather than financing temporary compensation. Second, the selected cost items are necessary to deliver actual public transport operations in corridor-feeder configurations anchored in eligible red sectors. Third, the temporary operational costs are limited to the ramp-up period and are intended to support transition to a more durable post-2032 operating model rather than to create a permanent subsidy need. Fourth, the zone-based costing approach allows the final deployment configuration to be adjusted to the results of the eligibility, additionality, technical-feasibility and cost-effectiveness methodology, which helps maintain plausibility and proportionality.

The indicative extended timeframe within which these costs are expected to be incurred

The indicative extended timeframe for the costs of this measure runs from 1 January 2027 to 31 December 2032, in line with the implementation period of the Social Climate Fund and the planned delivery sequence of the measure. Within that period, expenditures are expected to follow the operational logic of an automated corridor-feeder deployment rather than flat annual spending, with earlier years focused more on methodology, service selection, procurement preparation and technical readiness, and later years carrying a larger share of vehicle deployment, system integration, service launch and temporary ramp-up operations.

In 2027, costs are expected to arise mainly from finalising the eligibility and service-selection framework, confirmation of the red sectors and 2026 baseline, preparing the monitoring methodology, screening candidate corridor-feeder areas, and advancing procurement, design and technical preparation. These early costs may also include initial work on route definition, feasibility analysis, service concept development, and preparatory steps for contracting or framework activation, depending on the final procurement route confirmed by De Lijn and MOW.

In 2028 and 2029, expenditures are expected to shift towards deployment-related costs. These are likely to include vehicle and software ordering or delivery preparation, route mapping, safety validation, charging and depot/service-readiness adaptations, platform and booking/dispatch integration, remote-supervision or OCC readiness, staff training, commissioning, and the launch of the first automated corridor-feeder service zones.

In 2030, 2031 and the first half of 2032, costs are expected to be incurred mainly for scale-up within the selected zone(s), continued temporary operational ramp-up, service optimisation, monitoring, evaluation and reporting, and preparation for continuation after the end of SCF support. By Q2 2032, the full SCF-supported deployment should be operational and the main output and result evidence should be available for verification and reporting.

Information on the national contribution to the total costs of the measure and investment

Minimum 25 % co-financing

The national contribution for this measure will be 26.8% of the total costs, amounting to 11.15 million EUR.

Any information on which funding from other Union instruments in relation to the same measure/investment has been or could be envisaged

If not applicable: skip

n/a

Any information on envisaged financing from private sources and the level of leverage envisaged, where relevant

No financing from private sources is currently envisaged for this measure. The remaining local or regional funding needed will be covered through De Lijn's operational and investment budget as provided by the Flemish Government, and therefore through public rather than private sources.

The measure is designed as a public transport intervention implemented within the Flemish public transport system and not as a co-financed private mobility project. Suppliers selected through procurement may provide vehicles, software, maintenance or related technical services under contract, but such contractual payments do not constitute private co-financing of the measure.

At this stage, no private financial contribution is assumed from operators, employers, users or other third parties. If a leasing model, supplier-financing arrangement or other form of private financing were to be considered at a later stage, it would need to be identified separately, assessed for consistency with SCF, procurement and State aid requirements, and clearly distinguished from the public national contribution.

Justification of the plausibility and reasonableness of the estimated costs, if necessary, taking into account national specificities

See section 7 of the Guidance note, which provides different criteria for relevance of costs and also lists important aspects of the costs that are necessary.

The estimated costs of this measure are considered plausible and reasonable because they are derived from a bottom-up cost model that reflects technical and operational requirements of a targeted automated corridor-feeder public transport intervention in vulnerable and underserved areas, rather than from a generic cost-per-passenger estimate or a broad average for flextransport services. The estimate is built from identifiable cost drivers linked to one or more automated corridor-feeder deployment zones selected through the identified red sectors, with costs arising from vehicles, automation systems, software, route mapping, safety validation,

charging infrastructure, depot or service-readiness adaptations, remote supervision, platform integration, temporary operational ramp-up, monitoring and reporting.

This structure is consistent with the SCF Guidance [SCF Guidance, Section III.7(a)], which requires Member States to demonstrate that estimated costs are reasonable, plausible, in line with the principle of cost efficiency and commensurate with the expected social and economic impact of the measure. In this case, the estimate is plausible because it is aligned with the nature and type of the envisaged investment: the measure finances not only transport operations, but the full set of assets, systems and enabling capabilities required to deploy new automated, zero-emission public transport services integrated into the De Lijn network and targeted at vulnerable transport users in eligible underserved areas.

The estimate is also reasonable because it is framed around 2 substantial corridor-feeder zones, recognising that the EUR 41.7 million budget is significant in SCF terms but limited in relation to the cost of automated public transport deployment. This avoids overstating what can be delivered within the available budget and strengthens the proportionality between the scope of the measure and the estimated cost.

The cost profile of the measure is expected to be CAPEX-heavy, especially in the deployment phase, because automated zero-emission services require significant upfront investment in vehicles, automated-driving systems, software integration, route validation, supervision capability and charging readiness before passenger services can begin. This higher upfront CAPEX is justified by the fact that the measure creates durable public transport assets and capabilities that remain available after 2032, including vehicles, digital systems, route knowledge, validated service concepts, supervision arrangements, trained staff and operational data. In this respect, the measure is designed as a structural investment that creates lasting impact and supports reduced fossil-fuel dependency, rather than as a short-term compensation scheme.

The inclusion of operational expenditure is limited and justified. Under the SCF Guidance [SCF Guidance, Section III.8], regular operating costs may be financed only in duly justified cases, notably where they are an integral part of the measure, generate longer-term effects and are sustainably ensured after the Fund ends. In this measure, temporary ramp-up OPEX is limited to the initial deployment and stabilisation period and is necessary to activate the new service model, support early operations, train staff, establish remote-supervision arrangements, optimise the service and prepare mature operation beyond the SCF period. The measure therefore does not rely on SCF support as a permanent operating subsidy for conventional services.

The estimate is further supported by the intended evidence base. The underlying assumptions are to be validated using De Lijn procurement estimates, supplier market input, existing flextransport cost data, internal De Lijn automated-transport financial modelling and, where appropriate, comparable deployment evidence. This is consistent with the SCF Guidance [SCF Guidance, Section III.7(a)], which states that ex ante cost estimates should rely on accounting methods, historic costs, statistical data, credible studies, market prices or similar sources and should be traceable for possible checks.

From a cost-efficiency perspective, the measure should not be judged solely against a short-term cost-per-journey metric. The outline rightly distinguishes between deployment outputs that are directly financed and controlled by the measure, such as vehicles, service areas, red sectors served, hubs connected, service hours and zero-emission vehicle-kilometres, and passenger journeys, which remain result indicators influenced by demand ramp-up and local travel behaviour. This is important because the measure is intended to create socially targeted public

transport capacity in areas where conventional fixed routes are difficult to extend efficiently and where driver-dependent flextransport has weaker long-term scalability. In that context, higher upfront investment can still be cost-efficient at plan level if it enables durable service provision, stronger post-2032 viability and improved access for vulnerable users in places that would otherwise remain weakly served.

The measure's estimated cost reflects the social impact it is intended to deliver. It is designed as a targeted public transport intervention that improves affordable access to hubs, corridors and essential destinations for residents of statistically identified red sectors where poor accessibility and financial vulnerability overlap. The main social value lies in better access to employment, healthcare, education and essential services for vulnerable transport users, along with reduced dependence on fossil-fuelled private car use.

In Flanders, the measure is designed to operate within the existing basic accessibility model and to reinforce the flex transport layer through automation where fixed-route public transport is not efficient and where scaling conventional demand-responsive services with human drivers would create high recurring costs and dependence on driver availability. The cost structure therefore reflects the Flemish public transport context: integration into De Lijn's fare and platform environment, the need for corridor-feeder connections rather than stand-alone autonomous services, and the use of a statistical-sector targeting methodology to ensure that the principal benefits remain anchored in eligible vulnerable areas.

Table providing information on the estimated total cost of the measure/investment

Find more context information about the numbers below in the chapter on "Financing and Costs" (p. 45-48)

Number	Measure/investment	From date	To date	TOTAL	2027	2028	2029	2030	2031	2032
	I	1/01/2027	31/12/2032	EUR 41.700.000	EUR 4.900.000	EUR 11.000.000	EUR 11.000.000	EUR 4.900.000	EUR 4.900.000	EUR 5.000.000

Additionality

Explanation and justification of how the new or existing measures or investments are additional and do not substitute recurring national budgetary expenditure

For detailed explanation, section 9 of the Guidance note. The Fund can only finance new measures or scale up existing ones (under defined conditions)

As described extensively in the sections above, the measure is additional. It creates a new SCF-funded deployment layer for two zero-emission automated corridor-feeder public transport zones in the Kortrijk–Deinze and Menen–Roeselare corridors.

The measure does not finance the ordinary continuation of existing De Lijn services, existing flex transport, Leuven, Antwerp Noorderdokken or other non-SCF roadmap activities. These remain part of the 2026 baseline and readiness context.

SCF support will be used only for additional vehicles, services, enabling systems and temporary ramp-up costs directly linked to the two SCF zones. SCF-funded costs and outputs will be tracked separately through call-offs, service orders, project codes or equivalent accounting and audit records.

The national/Flemish contribution will also relate to the additional SCF measure and will not substitute recurring public transport expenditure. Existing services will continue to be financed through regular budget lines.

Compliance with EU State aid rules

Explanation of whether the aid for the measure or investment (i) does not constitute State aid within the meaning of Article 107(1) TFEU, (ii) is financed on the basis of an existing State aid scheme covered by a block exemption regulation, in particular the GBER, or is approved by a Commission State aid decision (indicating the reference number to such scheme (SA.nnnnn), or (iii) results in a new State aid measure; an explanation of whether the Member State will comply with the conditions of a block exemption regulation, for example the GBER (indicating which article thereof), (iv) will comply with the de minimis Regulation, (v) requires a notification of State aid, indicating the Member State's intention to notify in advance or to notify to the Commission the planned aid for the measure or investment; and the applicable State aid instrument ensuring its compatibility with the internal market.

For further explanation, see section 11 in the guidance note.

The measure will comply with applicable EU State aid rules. The final State aid assessment will be carried out by the competent Flemish and Belgian authorities before aid is granted, once the final

service design, procurement route, operational model and compensation mechanism have been confirmed.

Suppliers of vehicles, software, automated-driving systems, mapping, validation, maintenance and related technical support will be selected through transparent procurement procedures in line with applicable EU and Belgian public procurement rules. This is intended to ensure market-conform pricing and avoid selective advantage to suppliers.

Public financing of the automated demand-responsive public transport services may constitute State aid where the conditions of Article 107(1) TFEU are fulfilled. The assessment will not rely on the public-law status of De Lijn or on whether profit is made. If the final service design fulfils the conditions for public passenger transport services by road, including continuity, regularity and servicing at pre-determined stops or access points, Regulation (EC) No 1370/2007 may provide the relevant framework for public service compensation.

At this stage, it cannot be concluded definitively that all contemplated on-demand services fall within Regulation (EC) No 1370/2007. If they fall outside that Regulation, the competent authorities will identify the appropriate alternative compatibility basis before support is granted. Depending on the final design and compensation structure, this may include the SGEI de minimis Regulation, where all conditions and ceilings are respected, notification under Article 93 TFEU for transport services, or the SGEI Decision / SGEI Framework where relevant.

Where public service compensation is used, the authorities will ensure a clear public service designation and an entrustment act or equivalent legal instrument specifying the public service obligations, entrusted undertaking, service area and duration, compensation parameters, ex-ante calculation methodology, monitoring obligations and safeguards to prevent or correct overcompensation. SCF-funded costs and outputs will be tracked separately from existing De Lijn services, existing flex transport, Leuven, Antwerp Noorderdokken and other non-SCF activities.