



Ministry of Infrastructure  
and Water Management

# Heavy goods vehicle charge

Policy framework

## Background

The coalition agreement stipulates that, following the example of neighbouring countries, a Heavy Goods Vehicle Charge (HGVC) will be introduced as soon as possible. In consultation with the sector, the income from the HGVC will be returned to the transport sector by lowering the vehicle tax on heavy goods vehicles and will apply to innovation and sustainability<sup>1</sup>.

The process for introducing the HGVC is based on a so-called funnel model in which three phases can be distinguished<sup>2</sup>. In the first phase, the policy framework is drawn up. In the second phase, the bill will be drawn up and discussed and the tendering procedure will be prepared. And in the third phase, the award and subsequent implementation will take place, after which the system will come into operation.

A number of studies and input from various stakeholders were used to draw up this policy framework. Agreement has been reached with the sector (Transport en Logistiek Nederland, evofenedex and VERN) on the spending focus of resources for sustainability and innovation in the transport sector. Stakeholders will continue to be involved in the further elaboration of the HGVC.

In this policy framework, the most important starting points for the HGVC are discussed. In the second phase, the HGVC will be further elaborated.

## Purpose and nature of the HGVC

With the HGVC, the government aims to achieve the following objectives:

- To make domestic and foreign HGV traffic pay for the use of roads by converting a fixed tax (vehicle tax and Eurovignette) into a variable tax with payment per kilometre travelled. For example, HGV traffic will pay more for using the road than it does now.
- Innovating and making the Dutch transport sector more sustainable. In the coalition agreement, it was agreed that revenues from the HGVC would be returned to the transport sector, in consultation with the sector itself, not only by lowering the vehicle tax on HGVs, but also through innovation and improved sustainability.

The introduction of an HGVC and the investments in innovation and sustainability will contribute to the CO<sub>2</sub> reduction task for transport included in the coalition agreement and the desire to achieve a smart and sustainable transport system.

The HGVC is a special levy that follows from the coalition agreement and in which the revenue is returned to the transport sector. As indicated in the coalition agreement, the net revenue from the HGVC will be returned through a reduction in the vehicle tax for HGVs and will apply to innovation and sustainability in the Dutch transport sector.

## Assessment criteria for HGVC system

For the introduction of the HGVC, efforts are being made to implement, *in good time*, a *reliable* HGVC system that is *cost-efficient*, *manageable*, *flexible* and *user-friendly*. Furthermore, the HGVC system will be developed in such a way that there will be as few undesirable effects as possible on, for example, road safety and the Netherlands' competitiveness.

The following criteria will be used:

- *in good time*: the aim is to implement the HGVC system by 2023;
- *reliable*: the HGVC system must provide sufficient certainty that every kilometre travelled will be collected in a reliable manner;
- *cost-efficient*: the formulated objectives should be implemented as efficiently as possible at the lowest possible investments and operational costs during the system's lifecycle;
- *manageable*: the extent to which the system can be controlled, managed and adjusted to ensure the system continuously meets the requirements set for it;
- *flexible*: the system must be flexible enough to allow for parameters (such as location-based rates, direction of travel or vehicle characteristics) to be adjusted, even after introduction;
- *user-friendly*: meeting the obligations of the HGVC requires minimal effort from the user.

In certain cases, these criteria may have a mutually opposite effect. If maximum customer-friendliness is opted for, this can lead, for example, to higher implementation costs (lower cost efficiency) and vice versa. These aspects will have to be weighed against each other in the choices made during the further elaboration of the HGVC.

## European frameworks

In addition to the objectives and criteria, European frameworks for the elaboration of the HGVC play an important role. For example, the Eurovignette Directive<sup>3</sup> sets out the way in which the HGVC tariffs may be structured<sup>4</sup> and that tariffs must be differentiated based on the EURO vehicle emission standards.<sup>5</sup>

<sup>1</sup> *Vertrouwen in de toekomst* ("Trust in the future"), Coalition Agreement 2017-2021, 10 October 2017, p. 39.

<sup>2</sup> See Parliamentary Papers II 2017/18, 31305, no. 239.

<sup>3</sup> Directive 1999/62/EC of the European Parliament and of the Council of 17 June 1999 on the charging of heavy goods vehicles for the use of certain infrastructures (OJEC 1999, L 187).

<sup>4</sup> Article 7e Directive 1999/62/EC.

<sup>5</sup> Article 7g, first paragraph, Directive 1999/62/EC.

In addition, the Eurovignette Directive stipulates that the HGVC and the Eurovignette levy must not coincide.<sup>6</sup>

The Directive on the interoperability of electronic road toll systems (EETS Directive<sup>7</sup>) lays down conditions to ensure interoperability between electronic road toll systems in the European Union. The Directive applies to the electronic collection of all types of tolls on the entire EU road network. The Directive therefore also applies to heavy goods vehicle charging.

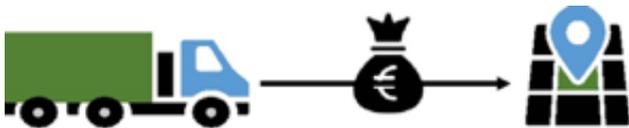
On the basis of the EETS Directive, Member States must provide access to private service providers for the collection of tolls. Users of the toll service (the road users) are thus enabled to pay tolls in all toll domains where electronic toll systems are used using a single contract with a single service provider.

The EETS Directive is currently being revised. It is expected to enter into force in early 2019. The main points of the revision are to allow more flexibility in the registration equipment to be used, and to enable the exchange of registration data between different Member States for enforcement purposes. With the exchange of data, the Netherlands can then send a fine to foreign vehicle registration certificate holders. This will make enforcement more effective and efficient and will create a level playing field. The changes to the EETS Directive are already being integrated in the elaboration of the HGVC. This will prevent any delays later in the process.

## Brief system description

From the perspective of an HGV driver, the HGVC system that the government intends to introduce will look like this.

The principle of the HGVC is that a levy is paid for the number of kilometres travelled on roads subject to the HGVC. The tariff amount will depend on the maximum permitted mass and the emission class of the HGV. By charging on the basis of the distance travelled, the ‘user pays’ principle is implemented.



Road users that want to use the infrastructure with their HGV must install an on-board unit in the vehicle. When an HGV travels on roads subject to the HGVC, the kilometres travelled will be registered by the on-board unit.



On behalf of the toll collector, the Dutch government, private providers of toll services will take care of this registration and the collection of the HGVC.

Verification equipment and physical roadside supervision will be used to check whether all HGVs have a correctly functioning on-board unit. An enforcement authority will be tasked with determining system compliance by road users. In addition, non-compliance can be detected by means of register comparisons. One example would be a situation where a registration number is entered in the vehicle registration data but no contract has been concluded with a service provider for the relevant registration number. A fine will be imposed if non-compliance is found.



The *Architectuurblauwdruk vrachtwagenheffing Nederland* (Netherlands HGVC Architecture Blueprint) contains a more detailed description of the HGVC system.<sup>8</sup>

## HGVC scope

### Vehicles

The intention is that the HGVC will apply to domestic and foreign vehicles intended for the transport of goods (HGVs) with a maximum permitted mass exceeding 3,500 kg. Trailer-towing vehicles with a maximum permitted mass of less than 3,500 kg will also be subject to the HGVC, as in Belgium. These vehicles are only suitable for the transport of goods in combination with a trailer. The combination of trailer-towing vehicle and a trailer practically always results in a maximum permissible mass exceeding 3,500 kg.

<sup>6</sup> Article 7(2), Directive 1999/62/EC.

<sup>7</sup> Directive 2004/52/EC of the European Parliament and of the Council of 29 April 2004 on the interoperability of electronic road toll systems in the Community (OJEU 2004, L 166).

<sup>8</sup> See appendix to Parliamentary Papers II 2017/18, 31305, no. 262.

The current Eurovignette Directive stipulates that HGVs weighing more than 3,500 kg should be subject to the HGVC if a toll is levied.<sup>9</sup> Only under certain conditions may Member States use a higher weight<sup>10</sup>, i.e. if avoidance routes would be used by vehicles between 3,500 kg and 12,000 kg or if adding this group of vehicles would entail administrative costs exceeding 30% of the additional revenue generated by said expansion. Neither of these exceptions applies to the HGVC.

In all European countries where tolls are compulsory, HGVs weighing 3,500 kg or more are subject to tolls, with Germany as the only exception. In Germany, tolls are compulsory from 7,500 kg.

Agricultural and forestry tractors, mobile cranes and speed-restricted vehicles will be exempted from the HGVC because these vehicles are not primarily intended for the transport of goods. Buses/coaches, ambulances and hearses are not HGVs and are therefore not subject to the HGVC. In Germany and Belgium, too, these vehicles are not subject to the HGVC.

In addition, an exemption will apply to a limited number of vehicle categories. The following categories will be exempted from the HGVC in any case:

- vehicles that are used exclusively by branches of the armed forces or the armed forces of friendly nations;
- vehicles that are used exclusively by police and fire departments and are registered to a police or fire department.
- vehicles that were first admitted at least 40 years ago and that are not used for commercial purposes;
- vehicles that are equipped and exclusively used for refuse collection, drain suction or streetcleaning.

The exemptions concern vehicles that may be exempted on the basis of the Eurovignette Directive<sup>11</sup> and are derived from exemptions contained in the 1994 Motor Vehicle Tax Act, Act on the Temporary Levying of Toll and the Western Scheldt Tunnel Act. In addition, the vehicles in the above categories were chosen because they are recognisable in the vehicle registration data. The possibility of linking the exemptions to vehicle registration data will make enforcement easier.

It also provides for the possibility of exempting certain subcategories of HGVs. Examples are vehicles with professional registration plates (used for test drives) and training vehicles. This will be further investigated over the coming period, taking into account exemptions (taxes, Eurovignette), the situation in other countries and the practicability of the system.

## Road network

The road network to which the HGVC will apply is the focus of research and consultation with, among others, the regional authorities through working groups and committees of the Interprovincial Consultative Committee (IPO), the Association of Netherlands Municipalities (VNG) and Dutch Water Authorities (UVW). The basic principle is that the HGVC is levied on all motorways as well as roads expected to be subject to substantial avoidance as a result of a charge applicable to motorways.

Based on model studies<sup>12</sup>, it has been calculated that a charge only applicable to motorways is expected to increase HGV traffic on the underlying road network<sup>13</sup> by 10 to 15%. This could have a negative impact on road safety and the environment. If the HGVC also applies to other roads, the potential avoidance behaviour towards the underlying road network will decrease. This will of course depend on which roads are added. According to the model calculations, a variant with a charge on motorways and N roads will lead to an increase of approximately 5% in the number of kilometres travelled by HGVs on the underlying road network.

In close consultation with the regional road authorities (provinces, municipalities and water boards), it will be determined per province which roads, apart from motorways, are likely to be prone to avoidance. Based on the expected traffic growth and the associated impact, an optimal choice can be made for the road network on which the HGVC will apply.

The actual avoidance behaviour can only be determined after the introduction of the HGVC. It will therefore be important to monitor its effects. Based on the undesirable traffic movements observed, it can be examined which measure could be used to prevent undesirable avoidance behaviour. Bans could be used for this or local roads could be added to the road network where the HGVC applies.

Depending on the ultimate scope of the road network on which the HGVC will apply, it will be proposed to make on-board units compulsory for all vehicles subject to the HGVC when using public roads. This will ensure that any modification of the road network on which the HGVC applies will be technologically simple and unambiguous to implement.

Neighbouring countries have introduced a charge on motorways and N roads. In Germany, a charge was introduced on 1 July 2018 on motorways and all *Bundesstraßen* (federal highways; comparable to the Dutch N roads).

<sup>9</sup> Article 7(1) in combination with Article 2(d) of Directive 1999/62/EC.

<sup>10</sup> Article 7(5), Directive 1999/62/EC.

<sup>11</sup> Article 6(2), Directive 1999/62/EC.

<sup>12</sup> See appendices to the Letter to Parliament on studies in the context of the HGVC (dated 5 November 2018).

<sup>13</sup> The underlying road network is defined as all roads not administered by the national government.

Belgium has a charge on motorways and a number of N roads. In Belgium<sup>14</sup> and Germany<sup>15</sup>, evaluations have not shown significant avoidance by HGVs on the underlying road network. Avoidance to the underlying road network has only been shown in a limited number of local situations.

## Tariff setting and differentiation

In terms of the Netherlands' competitiveness, it would be obvious to aim for alignment with average tariffs used in Belgium and Germany. The average rates in the neighbouring countries are currently around € 0.15/km. The rates in Belgium range between €0.076/km and €0.301/km. In Germany, rates range between €0.081/km and €0.218/km. From 1 January 2019, the rates in Germany will range between €0.093/km and €0.262/km.

The HGVC will be differentiated according to the weight class of (the combination of) the HGV (and the trailer) and its environmental characteristics (EURO emission class). The Eurovignette Directive requires differentiation on the basis of environmental characteristics (EURO emission class).<sup>16</sup> The tariff differentiation is in line with the systems in other European countries and with the differentiation of vehicle taxes.

The elaboration of the tariff differentiation based on weight and EURO emission classes has yet to be made. The Eurovignette Directive does not contain any rules on the method of differentiation. The only mandatory provision is that the maximum tariff must not be more than double the tariff for the cleanest emission class.

The lowest tariff will apply to zero-emission (electric) and lowemission (hybrid) transport.

The proposed tariff differentiation is in line with the differentiation applied in Belgium. Belgium has a differentiation based on EURO emission class, weight and location (per region).<sup>17</sup> Germany applies a differentiation based on weight in combination with the number of axles and EURO emission class.<sup>18</sup> Since differentiation on the basis of the number of axles would make the system more complex, the tariff will not be based on this.

## Enforcement

Enforcement is crucial to ensure sufficient certainty that the HGVC is collected for every kilometre travelled. Enforcement is therefore aimed at both promoting payment morale (preventive effect) and addressing non-compliance (corrective effect). As in other countries, enforcement action concerning the HGVC will be taken against the absence of correctly functioning on-board units, against road users not in possession of a valid contract with a service provider for HGVC collection and against forgery of vehicle registration documents. Vehicle registration certificate holders will be liable for compliance with the applicable laws and regulations. If a violation is found, a fine will be imposed on the registration certificate holder of the vehicle with which the violation was committed.<sup>19</sup>

A combination of administrative and physical enforcement will contribute to a credible HGVC system with an acceptable perceived risk of being caught. The measures will range from light measures with (relatively) few consequences for the registration certificate holders to heavier measures with more far-reaching consequences.

The measures concerned are the following:

- Imposing and collecting fines (for both Dutch and foreign vehicle registration certificate holders);
- Collection of fines through a bailiff for Dutch registration certificate holders. The intention is to make it possible for the relevant data to be transferred abroad<sup>20</sup> for foreign vehicle registration certificate holders<sup>21</sup>;
- Physical enforcement in the form of stopping the vehicle and taking provisional measures, such as impounding a vehicle or fitting a wheel clamp;
- Visits to Dutch companies where infringements are regularly found in order to avoid HGVs having to be impounded en route.

The details of the measures will be worked out in consultation with the proposed enforcer(s). The sanctions must be effective, proportionate and dissuasive.

It must also be possible to take account of the specific and special circumstances of the specific case.<sup>22</sup>

There are opportunities to link enforcement of the HGVC to existing forms of enforcement in other areas, such as checks for overloading of HGVs and verification of compliance with the rules governing driving and rest periods for HGV drivers. This concerns, for example, the repurposing of existing portals for physical supervision,

<sup>14</sup> *Analyse voor- en nameting kilometerheffing vrachtwagens* (Pre- and post-measurement analysis of HGV road pricing), Flemish Ministry of Mobility and Public Works, Policy Department, 2017.

<sup>15</sup> *Bericht über Verkehrsverlagerungen auf das nachgeordnete Straßennetz in Folge der Einführung der LkwMaut* (Report on traffic movements on the underlying road network following the introduction of the HGVC), 2016, information provided by the German Federal Government, press release 18/10567.

<sup>16</sup> Article 7g, first paragraph, Directive 1999/62/EC.

<sup>17</sup> Article 2.4.4.o.2 of the Flemish Tax Code.

<sup>18</sup> Annex 1 to the *Gesetz über die Erhebung von streckenbezogenen Gebühren für die Benutzung von Bundesautobahnen und Bundesstraßen (Bundesfernstraßenmautgesetz - BFStrMG)* (German Federal Trunk Road Toll Act).

<sup>19</sup> See appendix on enforcement principles to the Letter to Parliament on investigations in the context of the HGVC (dated 5 November 2018).

<sup>20</sup> Transfer to another European member state is only possible if the offence in question is also punishable in the member state concerned.

<sup>21</sup> This requires an amendment to the Mutual Recognition and Execution of Financial Penalties and Confiscation Orders Act.

<sup>22</sup> ECLI:EU:C:2017:229, C-497/15 and C-498/15 (Euro-Team Kft. and Spirál-Gép Kft./Budapest Rendőrfőkapitánya).

national collection (tendering to bailiffs) and the combination of physical enforcement. This could lead to savings in the enforcement set-up and in the implementation of more efficient enforcement and to a higher chance of being caught in several enforcement areas. In the further elaboration we will examine how the links can be made and which criteria will be used.

Under the Eurovignette Directive, sanctions must be effective, proportionate and dissuasive.<sup>23</sup> The amount of the fines will be based on such factors as fines from relevant Dutch legislation, such as the Heavy Vehicle Tax Act and the 1994 Motor Vehicle Tax Act. Amounts fined in Germany and Belgium will also be looked at.

Germany and Belgium have a similar combination of administrative and physical enforcement by conducting roadside checks. In both countries, as in other European countries, the compliance rate is around 99%.

## Organisation of collection, supervision and enforcement

### Collection

When an HGV is on roads subject to the HGVC, the kilometres travelled will be registered by the on-board unit. On behalf of the Dutch government, private providers of toll services will take care of the collection of the HGVC.

For the collection it is important that all vehicle registration certificate holders subject to the HGVC are able to join a toll service provider. This will enable them to pay for the use of roads on which the HGVC applies. The intention is to use independent private providers of toll services as much as possible for the collection of the HGVC. These providers supply their customers with on-board units and take care of the registration of the kilometres travelled, the invoicing and collection of tolls, customer service and the payment of these amounts to the government. By using providers that are active in several European countries, it is possible to pay tolls in several European countries with one contract and one on-board unit. Road users will be able to use existing on-board units of European providers in the Netherlands. The expectation is that private providers will compete on the quality of service to the user, and thus respond to the different needs of different users. Moreover, private providers often offer multiple services (such as fuel passes, breakdown assistance and fleet management). This offers users the opportunity to purchase multiple bundled – i.e. cheaper – services.

The coalition agreement stipulates that the registration and payment system to be introduced will be the same as in neighbouring countries, so that no extra equipment is required for

HGVs. Germany and Belgium are the main countries to be considered. The systems in both countries are the same insofar as it concerns registration and collection by means of an on-board unit.

In the Netherlands, on-board units used in Germany or Belgium can only be used if they are supplied by private providers operating in several European countries. However, both Germany and Belgium currently rely heavily on national providers. When the HGVC systems were introduced in these countries, no developed market of independent private providers existed yet. In 2013, for example, there was only one registered independent provider in Europe. Germany and Belgium have therefore concluded contracts with national providers that can only operate in the countries concerned. These national service providers are not allowed to offer their services in other Member States because they receive a fee from the government for the purchase of on-board units. These on-board units cannot simply be used in other countries because of state aid rules. For that reason, the services of the national service providers of Germany (Toll Collect) and Belgium (Satellic) cannot be offered in the Netherlands. Since the introduction of the HGVC in Germany and Belgium, eight independent private providers have become active on the European market. These providers will be admitted to the German and Belgian markets if they can meet the conditions. Four independent private providers have now been accredited in Belgium.

The market for private providers is still developing. This means that the timely introduction of the HGVC in 2023 may require the contracting of a national service provider in the Netherlands. With a national service provider it can be ensured that all road users (including occasional users) can conclude a contract with a service provider and thus comply with their HGVC obligation. On the other hand, as explained above, national service providers do not provide services outside the countries for which they are contracted.

In order to be admitted to the Dutch HGVC system, service providers must meet all the technical specifications of the toll domain that are included in the so-called *tolgebiedverklaring* (toll domain declaration). Such a declaration covers such aspects as the part of the road network to which the HGVC applies, the vehicles subject to the HGVC, the accuracy of the measurements of vehicles on toll roads, communication with enforcement authorities and the stability of the financial basis and flows.

### Monitoring of collection

The service providers conclude service contracts with a public organisation that takes care of the operational implementation of the HGVC. This organisation also carries out the supervision of the service providers. The public organisation determines the fees paid to service providers, receives the revenue from the HGVC, checks that service providers properly register and collect the HGVC and correctly transfers the revenue from the HGVC.

<sup>23</sup> Article 9a Directive 1999/62/EC.

## Enforcement

Enforcement of compliance by road users will be carried out by designated enforcers. Imposing and collecting the HGVC will be carried out by designated officials.

## Chain management

A large number of parties are involved in the implementation of the HGVC. Effective collaboration between the various parties in the chain is important. A public organisation will take care of the management of the entire implementation of the system and of communications about the HGVC in general.

## Conciliation Body

European Commission Decision 2009/750/EC (definition of the European electronic toll service and its technical elements) and the new draft EETS Directive require the establishment of a Conciliation Body to resolve any disputes between service providers and the organisation with which they conclude contracts. The Conciliation Body must be organisationally and legally independent of the commercial interests of toll service providers.

## Choice of organisations

An initial study shows that several existing government organisations should be able to carry out the public tasks of the HGVC described above. These include the Directorate-General for Public Works and Water Management (*Rijkswaterstaat*), Netherlands Vehicle Authority (RDW), Central Judicial Collection Agency (CJIB) and the Human Environment and Transport Inspectorate (ILT). In the near future, these organisations will be exploring whether and, if so, what role they could play in the implementation of the HGVC.

## Data, privacy and cybersecurity

Following the introduction of the HGVC, personal data will be processed, both by government agencies and by private parties. The HGVC must therefore comply with the requirements of the General Data Protection Regulation (GDPR) and the GDPR Implementation Act. The processing of personal data will take place on the basis of Article 6(1)(c) of the GDPR: the processing is necessary in order to comply with a statutory obligation incumbent on the data controller. This ground for processing will be included in the statutory provisions.

The purpose of the data processing is to ensure that the HGVC can be collected. The basic principle is that no more data will be collected than is necessary for the execution of the HGVC. In addition, the data will not be retained for longer than necessary. These aspects will be further developed in the legislation.

Service providers of the HGVC will be obliged to make user data available to the supervisory authority in order to enable monitoring of the collection. In addition, just as in Belgium, they will be obliged to make user data available to the government free of charge, if possible in real time but in any case stripped of

privacy-sensitive information. These usage data can be used for policy purposes. For example, the data contribute to the quality and effectiveness of traffic management, traffic information and offer the opportunity to further optimise traffic models.

Each party in the chain will take the appropriate technical, organisational and legal measures to reasonably prevent the risks associated with data processing from materialising. For this purpose, the experiences of Germany and Belgium will be used.

## Relationship in terms of system engineering with temporary toll schemes and existing toll tunnels

New temporary toll projects are currently being set up (Blankenburg link and ViA15) and there are existing toll tunnels (Kil Tunnel and Western Scheldt Tunnel). The objective of the toll projects and tunnels is to finance the infrastructure concerned. This will not change with the introduction of the HGVC. In locations where tolls are already payable, the HGVC would be superfluous and therefore undesirable. For that reason, the HGVC will not apply on these routes.

In practice, the HGVC differs from the other toll projects. For example, the HGVC is based on the distance travelled and the other toll projects are based on the passage of a single toll point. The technical systems are therefore partly different.

There are a number of similarities between the HGVC and the temporary toll yet to be implemented on the Blankenburg link and ViA15. For example, both systems use the principle of 'free flow': registration is done by means of an automated system without barriers so that vehicles do not have to stop to pay. There are also some differences: for example, the toll also applies to private cars and it is not compulsory to have an on-board unit for registration. Consideration will be given to how the systems can be linked up as efficiently as possible without the system becoming too complex. A study is currently being carried out to this end.

## Promotion of sustainability and innovation in the transport sector

The coalition agreement includes a provision that revenues from the HGVC would be returned to the transport sector, in consultation with the sector itself by lowering the vehicle tax on HGVs and through innovation and improved sustainability. The government will decide on the redistribution of the revenue of the HGVC in consultation with the sector. The funds will only be available after the introduction of the HGVC in 2023; pre-financing of measures is therefore not possible.

As indicated earlier, the three sector parties (Transport en Logistiek Nederland, evofenedex and VERN) have been invited for constructive input, to share their first ideas and to join forces. It has been agreed with the sector parties that during this phase of the programme, the main focus will be on spending focus options, which will be worked out into concrete measures via a sustainability and innovation agenda. The sector parties will of course remain actively involved in the further elaboration over the coming years of the allocation of the funds for innovation and sustainability. Over the coming years, the sector, market, scientific community and government will jointly draft a sustainability and innovation agenda and will advise the Minister of Infrastructure and Water Management on how to spend and allocate funds. The measures need to be effective and efficient and contribute to the promotion of a *sustainable, smart and innovative* transport system. A distinction is made between two primary objectives, three secondary objectives and six focus areas for funding (see below).

Firstly, it is about creating a sustainable transport system by reducing CO<sub>2</sub> emissions and reducing negative environmental impacts by means of the following objectives:

- an acceleration of the introduction of non-fossil driving;
- a reduction in emissions of particulate matter and NO<sub>x</sub>;
- noise reduction.

Secondly, it concerns the promotion of a smart and innovative transport system by optimising the logistics chain for which the following objectives have been formulated:

- increasing the safety of equipment and personnel;
- promoting integrated supply chain management;
- enabling efficient and zero-emission urban distribution.

In the coming period, these six focus areas will be developed into concrete measures via a sustainability and innovation agenda. Where possible, they will be linked to existing and proposed incentives for sustainability and innovation.

### Assessment criteria

The measures to be taken should contribute effectively and efficiently to the objectives, *offer guidance* for the transport sector and ensure *equal opportunities* for all entrepreneurs.

The criteria are defined as follows:

- effective (or efficient) – the extent to which the measure contributes to the achievement of the objectives pursued. A fragmented landscape with a multitude of measures should be avoided;
- efficient (or effective) – the measures contribute to sustainability and innovation in the sector with a good cost-benefit ratio and minimise the burden on entrepreneurs;
- guidance – the measures are sufficiently robust to provide entrepreneurs in the transport sector with long-term investment security and thus enable them to make responsible investment decisions;
- equal opportunities – the measures for innovation and sustainability lead to opportunities for large and small businesses.

Sector relevance and legitimacy are preconditions for the further specification of the measures. These preconditions are understood to mean the following:

- sector-relevant – the measures will directly or indirectly benefit the freight operators (or their representatives) subject to the HGVC;
- lawful – in line with the Government Accounts Act and specifically taking into account the rules on state aid.

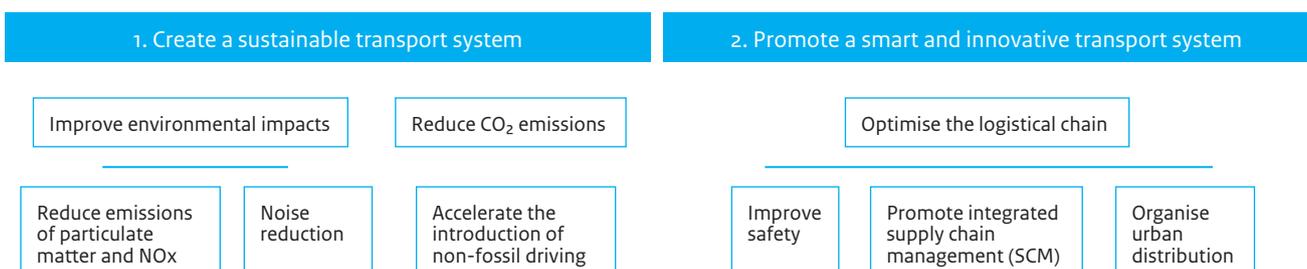
These criteria and preconditions were established in consultation with the sector.

## Financial aspects of the HGVC

The HGVC will ensure a transition from a fixed tax (motor vehicle tax and Eurovignette) to a variable charge with payment per kilometre travelled.

### Variable cost

The cost of the HGVC for road users (and the income for the government) depends primarily on the rate chosen per kilometre and the number of kilometres travelled. In addition, the cost will vary according to the road network to which the HGVC applies. The degree of economic growth and the development of the vehicle fleet also play a role. The estimate of the cost varies between



approximately €600 million in the case of an HGVC on motorways only, and approximately €1.1 billion per year if the HGVC applies to all roads (2018 price level) at an average tariff of €0.15/km.

The burden of an HGVC on motorways and roads where substantial avoidance takes place will therefore lie somewhere in between.

This will be shown in more detail once the road network has been established.

### System costs

Implementation costs will be incurred in order to introduce and operate the HGVC. These will be financed from the revenue it will generate. A distinction can still be made between one-off investment costs and annual operating costs.

The one-off investment costs are necessary to develop the system and make it ready for use. The total investment costs are around €200 million (2018 price level).

The annual operating costs of the HGVC system are estimated at €100 to €125 million per year. This range is in line with the costs that – according to international research – apply to other electronic toll systems.<sup>24</sup>

### Effect on existing taxes

With the introduction of the HGVC, the Eurovignette (HGV road toll) will no longer be levied in the Netherlands. The expected revenues from the Eurovignette for the Netherlands amount to approximately €190 million annually (2018 price level). These revenues for the government (and charges for road users) will be abolished. This loss will be covered by the revenue from the HGVC.

As soon as the HGVC is introduced, the motor vehicle tax for HGVs will be reduced. The reduction in vehicle tax will result in approximately €33 million less income for the government (and costs for road users) per year (price 2018 level).

The research into the effects of the HGVC shows that fewer kilometres are driven by HGVs than in a situation without an HGVC. In addition, there is a limited increase in the number of kilometres driven by private cars. Added together, this will result in a limited loss of excise duty of approximately €35-55 million per year (2018 price level). This loss will be covered by the revenue from the HGVC.

### Funding for innovation and sustainability improvements

In consultation with the sector, the net proceeds from the HGVC will be used to make the Dutch transport sector more sustainable and innovative. The net proceeds are the revenues from the HGVC minus the system costs, compensation of the vehicle tax reduction for HGVs and compensation of the loss of revenues from the Eurovignette and excise duties. The focus areas for funding will be

worked out into concrete measures via a sustainability and innovation agenda.

### Budgetary processing

The HGVC revenue is part of the income framework of the national budget. The net revenue from the HGVC is used to make the Dutch transport sector more sustainable and innovative. These funds for sustainability and innovation form part of the expenditure framework of the national budget. Both the HGVC revenue and its 're-injection' are estimated as part of the budget of the Ministry of Infrastructure and Water Management. The estimates will be automatically recalibrated for each cabinet formation. In any case, the following variables will be included in the adjustment of the revenue estimate: tariff level, current prognoses of kilometres travelled, road network on which the HGVC applies, vehicles subject to the HGVC, composition of the vehicle fleet, operating costs and tax losses. The adjustments will not be adjusted retroactively for results from previous years.

## Effects of the HGVC

The HGVC is intended to make domestic and foreign HGV traffic pay more than they do now for the actual use of the road, and to return the revenue back to the transport sector to promote innovation and sustainability. The introduction of the HGVC will have a number of effects.<sup>25</sup> The maximum effects the levy is expected to have at an average tariff of €0.15/km are described below. The (positive) effects of spending the funds on innovation and sustainability have not yet been included in this. In order to assess the effects of innovation and sustainability, it is necessary to look at concrete measures. The measures for innovation and sustainability have not yet been worked out. Once these measures have been elaborated, the effects of these measures will be identified.

The HGVC will result in higher costs for the transport of goods by road. This will slightly reduce the number of tonnes transported by road (approximately 0.7%). In addition, goods will be transported by road over shorter distances. It can also be expected that goods will be transported more efficiently and that slightly fewer journeys will therefore be needed to transport the same quantity of goods. The number of kilometres travelled by HGVs on the Dutch road network will fall by approximately 5%. In addition to improving the efficiency of road transport, freight transport by rail and inland shipping will increase slightly.

With the HGVC, a carrier will make a new assessment about the route to be chosen. The choice will be between maintaining the existing route and paying the associated HGVC, or changing to a route with a lower 'HGVC cost' but with a longer journey time.

<sup>24</sup> Annex to Parliamentary Papers II 2017/18, 29398, no. 611 (international research).

<sup>25</sup> For a more detailed description of the expected effects, see the appendices to the cover letter on the HGVC policy framework and the appendices to the letter to the House of Representatives on studies in the context of the HGVC (dated 5 November 2018).

With an HGVC on motorways only will result in a relatively large number of alternative routes for HGVs to choose from (including a number of important N roads) in order to avoid the HGVC. This will lead to an increase of 10-15% in the number of kilometres travelled by HGVs on the underlying road network. If, in addition to motorways, the HGVC also applies on N roads, there will be far fewer alternatives. In that case, an increase of about 5% on the underlying road network is to be expected. An HGVC on all roads would have a small effect, because in this situation choosing a shorter route and thus minimise costs would only be worthwhile for a limited number of HGVs.

The impact on road safety largely depends on the extent to which HGVs avoid the HGVC by using the underlying road network. In the case of a motorway and N-road charge, the negative effect on road safety due to such avoidance is compensated by an improvement in safety on motorways. On balance, the effect is therefore neutral. As indicated above, any avoidance behaviour will be monitored and, if necessary, adjustments can be made to the road network on which the HGVC applies.

Less freight traffic on the road will result in an estimated CO<sub>2</sub> emission reduction of 0.15 to 0.2 megatons per year. The CO<sub>2</sub> emissions of all road traffic (passenger and freight traffic) will decrease by approximately 0.7%. Emissions of harmful substances such as particulates and nitrogen will also drop slightly nationally. No account was taken of the impact on local air quality bottlenecks.

The HGVC will drive up the difference in costs per vehicle kilometre between a small HGV and a large delivery van. As a result, there is a risk that cargo may shift from HGVs to delivery vans. This only applies to cargoes that fit in a single van and therefore weigh less than 2 tonnes. Only a small part (1.6%) of current HGV transport relates to these small cargoes of less than 2 tonnes. It is therefore expected that the scope of such a shift will remain limited. The cost per tonne-kilometre for HGVs is still lower for larger consignments or a bundling of smaller consignments above 2 tonnes, than for vans.

The HGVC will result in an increase in costs for manufacturing sectors. In those sectors where road transport accounts for a large share of the costs, this increase will not exceed 0.2%. A potential knock-on effect could be a small increase in consumer prices (up to +0.06%). In addition, the HGVC may lead to a small decrease in employment. This is also a marginal effect (up to 0.05%). A social cost benefit analysis (SCBA) shows a negative balance of costs and benefits for all the variants and scenarios considered. The analysis shows the balance becoming more positive the higher the HGVC revenues are and the more roads in the Netherlands it is applied to. System costs, effects on freight transport and indirect effects are the most significant negatives. It is important to note that the positive effects of spending the revenues on sustainability and innovation have not yet been included in these estimates. Research from Belgium and Germany shows that different approaches to returning the revenue have the potential to convert possible negative effects on production, consumption and the economy into positive effects.

If carriers are unable to pass on the additional costs to their clients, the HGVC may reduce their short-term profitability to a limited extent. The HGVC improves the competitiveness of Dutch carriers compared to foreign carriers. This is mainly due to a cost advantage by lowering the motor vehicle tax that only benefits Dutch carriers.

## Relationship with national programmes

The HGVC will affect other existing and new national programmes, such as the Strategic Plan Road Safety (*Strategisch Plan Verkeersveiligheid*), the National Climate Agreement (*Klimaatakkoord*), the National Air Quality Cooperation Project (*Nationaal Samenwerkingsprogramma Luchtkwaliteit*) and the Programmatic Approach to Nitrogen (*Programma Aanpak Stikstof*). The HGVC generally contributes to the objectives of these programmes. For example, the funding for sustainability – because revenues are returned to the sector – is used to reduce emissions of particulate matter, nitrogen and CO<sub>2</sub>. The HGVC itself also helps to reduce emissions of these substances to some extent. Where the HGVC may lead to negative effects, these will be avoided as much as possible. For example, negative effects on road safety are limited by extending the HGVC to roads that are subject to substantial avoidance, and by making adjustments where necessary on the basis of the results of monitoring.

## Follow-up

This document forms the framework for the bill, the further elaboration and preparation of the implementation of the HGVC.

### Legislation

There is currently no legal basis for introducing an HGVC. New legislation is therefore needed. The internet consultation of the bill is expected to take place before the summer of 2019, in accordance with the motion by Sienot & co. (Parliamentary Papers II 2017/18, 29 398, No 589).

For the sake of flexibility, the starting point for the drafting of the bill is that the law provides a framework on the main points and that detailed provisions are delegated to general administrative measures or ministerial regulations as much as possible, in accordance with the Instructions for Regulations.

### Preparing the implementation of the HGVC

In order to introduce the HGVC as soon as possible, the preparation of its implementation will be closely linked to the legislative process. The preparation of the implementation starts with the drafting of the technical principles of the system. These principles will be combined in an overall design. Together, the policy framework and the overall design form the basis for the tendering procedure for the implementation of the HGVC system. The implementation project will be awarded as soon as the law has been passed by Parliament.

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