

EVALUATION AND FITNESS CHECK (FC) ROADMAP			
TITLE OF THE EVALUATION/FC	Evaluation of the legislation on the European Electronic Toll Service (EETS) - Directive 2004/52/EC and Decision 2009/750/EC		
LEAD DG RESPONSIBLE UNIT	MOVE/D3	DATE OF THIS ROADMAP	09 / 2015
TYPE OF EVALUATION	Evaluation	PLANNED START DATE	02 / 2015
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A. Purpose

(A.1) Purpose

The general objective of the ex-post evaluation is to provide the Commission with an assessment of the effects of the legislation on the European Electronic Toll Service (EETS) and its implementation over the period of 2004-2014. This should notably include the assessment of:

- the level and accuracy of implementation of the legal framework;
- the relevance of the objectives;
- the effectiveness and efficiency of the individual provisions in achieving stated objectives.

Depending on its results, the evaluation may form the basis for a review of the legislative framework for which the wide stakeholder community has been calling in recent years.

(A.2) Justification

Directive 2004/52/EC ('EETS' Directive) and Commission Decision 2009/750/EC defining the European Electronic Toll Service set up a legal framework to achieve interoperability of the electronic road toll systems in the European Union. However, since their adoption Member States and stakeholders have reported problems in their practical implementation. In particular, in line with the 'EETS' Directive, full interoperability of electronic tolls for Heavy Duty Vehicles (HDV) should have been achieved by October 2012, and for other vehicles by October 2014. Neither of these deadlines has been met, and a European Electronic Toll Service (EETS) is unlikely to be provided to users in the short term if nothing changes.

In the Commission communication to the European Parliament and the Council entitled 'Implementation of the European Electronic Toll Service' (COM(2012)0474), the Commission made a preliminary assessment of the reasons why the current legal framework has not led to the expected development of an interoperable European electronic road toll service between Member States.

As an answer to the report, the Parliament in its report on a strategy for an electronic toll service and a vignette system on light private vehicles in Europe (2012/2296(INI)) indicated that it "[b]elieves that the Commission should consider appropriate legislative measures in the area of interoperability as soon as possible, so as to oblige all stakeholders to advance the EETS project". Furthermore, the Parliament "[c]onsiders that the market-demand-based approach has failed to produce the desired results and that it is necessary to look into the shortcomings which have led to this situation."

Both the findings of the Commission Communication and the resolution of the Parliament call for an ex post evaluation of the rules in place to identify problem areas.

B. Content and subject of the evaluation

(B.1) Subject area

Tolling is wide-spread on European roads. However, most of the electronic fee collection systems in different Member States are not interoperable, which could bring a number of negative consequences for road users. The situation is different for private car users and heavy good vehicles (HGV).

Private car users are familiar with tolls on motorways in Croatia, France, Greece, Ireland, Italy, Poland, Portugal and Spain. In addition, cars are also tolled in other countries on certain installations such as bridges (e.g. Oresund bridge between Sweden and Denmark), tunnels (e.g. tunnel under the Mont Blanc) or for entering certain city centres (e.g. London congestion charging schemes).

In most of these tolling schemes, users can choose between electronic tolling requiring the presence on board of the vehicle of a dedicated transponder (on-board unit, or OBU) and manual payment of the toll (at the toll booths). For most of the private users, when occasionally travelling abroad, the hassle of paying manually seems to be at an acceptable level. In what regards tolls for entering cities such as the

London Congestion Charge, they are typically based on automatic number plate recognition technology, which does not require installing an on-board unit, and therefore does not raise problems of interoperability.

The situation is different for **heavy goods vehicles**: in seven Member States (Austria, Czech Republic, Germany, Hungary, Poland, Portugal, Slovakia), soon to be joined by Belgium, electronic tolling with OBUs is (nearly¹) the only available payment method. Moreover, as trucks go abroad on a regular basis, the hassle of using manual payment for HGV in countries where both paying methods are available (i.e. Croatia, France, Greece, Ireland, Italy, Slovenia and Spain) is relatively higher than for occasional private car or van users. The lack of interoperability of electronic tolls means that hauliers must equip their vehicles with more than a dozen OBUs – sometimes very costly² - and sign an equivalent number of electronic tolling contracts to be able to drive unhindered on EU roads. This – contrary to the situation of car and van drivers – constitutes a considerable burden and cost for the operators.

The EETS was set up as an answer to the abovementioned problems of road users ensuring the full European interoperability of electronic road tolling technologies it should create economies of scale and reduce the costs of toll collection equipment. The EETS should ease the payment of road use charges by drivers when they go abroad. Users would be more readily accept to pay for using roads if the payment means are interoperable at European level.

In its 2011 White Paper “Roadmap to a Single European Transport Area” the Commission has outlined possible measures to accelerate the development and the harmonisation of road use charging.

Directive 2004/52/EC establishes the basis for the interoperability of electronic tolls in the EU by:

- establishing an exhaustive list of three technologies which can be used for electronic tolling in the EU,
- provides for the establishment of an EETS on the model of "one on-board unit – one contract – one invoice" for the use of any toll roads in the Union.

Decision 2009/750/EC defines the EETS by notably providing for the rights and obligations of the different actors. The Decision foresees that interoperability be achieved by market actors on commercial terms: third party service providers ('EETS providers') negotiate interoperability with all toll chargers (i.e., in practical terms, operators of the roads) in the EU; then, they offer a single interoperable tolling service to the road users.

However, the system does not seem to function correctly. According to the Commission's initial research, the respective rights and obligations in the Decision contain provisions that are difficult to be met by EETS providers. For example bank guarantees amounting to a maximum fixed at the equivalent of one month of toll transactions; or coverage of all the 140+ electronic toll domains in the EU within 24 months from their registration;

The Decision does not explicitly give EETS providers the right to be remunerated for their services, even if the toll charger pays his own service provider for the same work.

In its Communication on the *Implementation of the European Electronic Toll Service* (COM(2012) 474 final), the Commission also identified the following problems, hampering progress on electronic tolling interoperability such as lack of co-operation between the different stakeholders groups, national frameworks are not yet set up, contractual clauses which automatically ends the contract if the EETS provider has not reached full European coverage within 24 months, costly assessments of interoperability

¹ In Germany, Hungary and Slovakia it is also possible to buy 'tickets' for a given route, but it is relatively burdensome and not flexible (not possible to divert from the pre-established route).

² Depending on the technology, OBUs can cost up to 150-200 euros.

and tests for “suitability for use”; and running concession contracts incompatible with the requirements of EETS.

Since 2013, the Commission co-finances a regional interoperability project REETS³ involving Member State administrations, toll chargers and toll service providers from 7 EU Member States (Poland, Germany, France, Austria, Spain, Italy, Denmark) and from Switzerland. The project aims at facilitating deployment of interoperable toll services first among these countries, in which most of the EU transit traffic takes place. After an analytical phase, the project entered the deployment phase, where participating service providers negotiate interoperability arrangements with toll chargers. The analytical phase identified problems – including in the EU legal framework – which delay the achievement of interoperability and which also risk jeopardising the success of the deployment phase.

(B.2) Original objectives of the intervention

General objective:

- Improve the functioning of the internal market for electronic fee collection.

It should address that the proliferation of technologies and the proliferation of specifications imposed by the Member States and neighbouring countries may compromise both the smooth operation of the internal market and transport policy objectives.

Specific objectives:

- reduce for road users the hassle and costs of compliance with the requirement to pay tolls.

Costs and hassle linked to installing, updating and handling the on-board equipment and the stress for the drivers who are not sure if they comply with the rules.

- reduce for toll chargers the costs of setup, operation and administration of electronic fee collection systems.

Setting up of proprietary systems by the toll chargers increases the costs of the setup, operation, administration and enforcement of electronic tolling which could be reduced by the interoperability.

Operational objectives:

- ensure that the technologies and components provided for in national electronic fee collection systems can be combined with other vehicle components e.g. the digital tachograph and the e-call (emergency call device) or tracking and tracing devices of vehicles to save money on redundant equipment.
- ensure interoperability of electronic tolls at technical, contractual and procedural levels.

The interoperability needs to be achieved at three levels.

First, a certain level of technical harmonisation must be achieved of the communication between OBUs, the ground infrastructure and the back office of the toll charger.

Second, procedures for calculating and transmitting toll information need to be compatible.

Finally, removal of legal barriers and establishment of balanced rights and obligations to reach contractual agreements of the EETS provider with all toll charges to be able to offer the road user one single contract operable throughout the EU.

³ www.reets.eu

(B.3) How the objectives were to be achieved

A diagram summarizing the intervention logic is annexed.

The Directive provided a list of 3 technologies allowed to be used for electronic tolling in the EU, and specified the mandatory standards to be applied for the microwave communication between on-board units and the ground infrastructure of the toll charger. These provisions were expected to stop the proliferation of incompatible tolling technologies – a pre-condition for interoperability. Furthermore, it was recommended that all new tolling systems introduced after 2004 use satellite positioning and GPRS communications. Thus technological differences between national tolling systems should gradually disappear, taking away technological obstacles to interoperability in the medium term. This should be accompanied by the harmonisation of procedures applied by different toll chargers. All in all, the technical and procedural harmonisation should have led to a considerable reduction in the costs of electronic tolling, both for the toll chargers (because of economies of scale) and for the users. It would also allow the integration of the (harmonised) on-board units with devices already made mandatory by the legislation, such as the digital tachograph or e-call, again bringing additional savings.

The Decision specified in details the rights and obligation of toll chargers, EETS providers, EETS users and Member States. Greatest emphasis was put on the obligations of EETS providers to limit as much as possible the chances that they fail to transfer to the toll chargers the toll due; in particular, the Decision provides for the possibility for toll chargers to request from EETS providers very high bank guarantees (amounting to a maximum of the equivalent of one month of toll due). The Decision also specified minimum requirements for the registration of EETS providers by Member States, so that companies which access the market are reliable, and established safeguard clauses in case a Member States has reasons to believe that interoperability constituents are unlikely to meet essential requirements as specified.

The Decision also requested Member States to establish independent 'conciliation bodies' to supervise the correct application of the right and obligations of all partners (in particular to make sure that there is no discrimination in the treatment of different EETS providers). It further provided for the mandatory separation of accounts if a toll charger also provides EETS services.

C. Scope of the evaluation/FC

(C.1) Topics covered

The evaluation will assess the implementation and effects of the EETS in all 28 Member States. It will cover the 10-years period⁴ starting from 20 May 2004, when EETS Directive entered into force, until 31 December 2014. The assessment of the implementation of the Decision will cover the period from 13 October 2009, when the Decision was published, until 31 December 2014.

(C.2) Questions/issues to be examined

Relevance:

1. To what extent is interoperability of electronic tolls needed by the users? Is the answer different for different types of road users (in particular heavy goods vehicles vs. other users)? Is it likely to change over time?

⁴ The assessment of the implementation in Bulgaria, Romania and Croatia will start as of the date of their accession to the European Union, respectively 2007 (BG and RO) and 2013 (HR).

2. To what extent the objective of having interoperability at all three different levels (technical, contractual and procedural) is equally needed by the users? Would any of the three levels of interoperability be less relevant?
3. To what extent does the level of the costs (and hassle) caused by the lack of interoperability justify policy intervention to facilitate interoperability? How has the gradual increase in the length of tolled networks and number of electronic toll systems in the EU affected the relevance of the objectives of reducing costs for users and for toll chargers?
4. To what extent the coverage of the framework in terms of users and geographical scope is adequate to the needs of the sector? For instance, is interoperability needed for some or all road user types?, Is it relevant to cover all toll domains in the EU? Could it cover less, e.g. main transit countries? Or should it cover more, e.g. Switzerland, EEA, Western Balkans, Turkey, Community of Independent States, etc.?
5. Is there still a need to ensure that the technologies and components provided for in national electronic fee collection systems be combined with other vehicle components?

Effectiveness:

6. Have the provisions of the Directive and of the Decision led to the technical, contractual and procedural interoperability of electronic tolls? What has hindered/contributed to the achievement of this objective?
7. Have the standards imposed by legislation been sufficient to render e-tolling systems technologically compatible? If not, what is the reason for that?
8. Has the integration of on-board units with other devices such as e-call or the digital tachograph happened and if so did it allow for reduction of the costs? Is it technically feasible and economically warranted?
9. To what extent did toll chargers comply with the requirement to use only three technologies? To what extent did it help achieve interoperability? Has it lead to any unintended effects?
10. Has the cost of setup and maintenance of electronic toll systems for toll chargers changed? Has the cost and administrative hassle for tolled road users changed? If so, can this be attributed to the effects of the evaluated legislation?
11. Have the provisions of the Decision led to the setup of the EETS? What has hindered/contributed to the achievement of this objective?
12. To what extent has the legal framework led to the improvement of the internal market for electronic fee collections? What factors have contributed to or hindered the achievement of this objective?
13. Has the legal framework led to any unintended effect (negative of positive)?

Efficiency:

14. What are the current costs (including opportunity costs of not using another suitable technology) and benefits of the approach limiting to three the number of technologies allowed to be used for electronic tolling? What will be their possible level in the short-to-medium future? Are the answers different for different types of vehicles (heavy vs. light vehicles)?
15. Are the costs of the approach involving third party providers (EETS provider)) adopted in the Decision lower than the benefits associated with the EU wide interoperability of the toll? Would the relation between the costs and benefits be better had an alternative approach been chosen (e.g. deployment of EETS through agreement between toll chargers, or as a public service obligation, etc.)?

European Added Value:

16. What is the added value of setting a legal framework to achieve interoperability of the electronic road toll systems at EU level? Could a satisfactory (for the users) level of interoperability be achieved by the member states, without EU action?

Coherence:

17. To what extent the legal framework is coherent with the goals and provisions of existing and upcoming EU legislation? In particular, how does this initiative fit in the overall ITS legal framework?
18. To what extent are the provisions of the Directive and of the Decision coherent and consistent? Are there any incompatibilities or contradictions between individual provisions?

(C.3) Other tasks

To support the ex-post evaluation the following tasks will be carried out:

1. Desk research so as to provide mapping of Member States' administrative arrangements for implementation, as well as the situation on the electronic tolling market in the EU;
2. A consultation with Member States and the EU stakeholders notably, but not exclusively, via the regional interoperability project REETS⁵ co-financed by the Commission;
3. Development of a dissemination strategy.

D. Evidence base

(D.1) Evidence from monitoring

A 2010 report on the possible migration from systems using technologies other than the ones allowed under the Directive in accordance with Article 2.3 of the Directive. The report does not provide any substantial data for this evaluation.

(D.2) Previous evaluations and other reports

Commission Communication of 2012 on 'Implementation of the European Electronic Toll Service' (COM(2012)0474), containing a preliminary assessment of the reasons why the current legal framework has not led to the expected development of an interoperable European electronic road toll service between Member States.

In 2014, a study was published evaluating the road charging policy in general (including a general

⁵ www.reets.eu

⁶ <http://ec.europa.eu/smart-regulation/evaluation/search/download.do?documentId=10296156>

⁷ http://reets.eu/index.php?option=com_phocadownload&view=categories&Itemid=109

evaluation of the EETS legislation, with main focus on Directive 1999/62/EC).⁶
 In 2014, the REETS consortium published a list of deliverables analysing the gaps and problem areas which are preventing the rapid deployment of interoperable electronic toll services in the EU.⁷

(D.3) Evidence from assessing the implementation and application of legislation (complaints, infringement procedures)

The vast majority of Member States have not complied with all the requirements of the Decision. Infringement procedures have been launched against 4 Member States, while the Commission is asking for information through EU Pilots to 19 other Member States.

The infringements concern the non-compliance with one or more of the following obligations:
 - setting up of a conciliation body (art. 10-11 of the Decision);
 - allowing the registration of EETS providers (art. 3 of the Decision, first paragraph);
 - publishing registers on the EETS domains and EETS providers on the territory of the Member States (most important provision, art. 19 of the Decision)

(D.4) Consultation

	When?	How?/Who?
Member States:	Throughout the evaluation process	Mostly Member States having any EETS domains on their territory; the REETS project will be a privileged contact point, but Member States from outside the project will equally be consulted, notably in the framework of the EETS committee.
Business, trade, NGOs etc:	Throughout the evaluation process	The following three associations and their members will be the privileged contact points: ASECAP (association of toll chargers); AETIS (association of prospective EETS providers); REETS (consortium running an interoperability project and co-funded by the EU). The notified bodies coordination group will be the contact point for certification questions Also, we will consult standardisation organisations (ETSI, CEN, CENELEC). Users will be consulted through their organisations in Brussels (IRU for professional transport companies, FIA for individual motorists). Other targeted consultations as necessary.
Public:	<i>At the end of the evaluation and before the IA (foreseen for September 2015)</i>	A general public consultation targeting professional drivers and transport companies as well as private car owners will be launched on the findings of the evaluation together with possible options to address the issues.

(D.5) Further evidence to be gathered

Most of the information will be provided by the stakeholders' consultation. Information on the costs and benefits of technological solutions currently applied, as well as those which are not allowed under the current framework, will be provided by the on-going study on *The state of the art of electronic tolling*. Finally, an expert reading of the relevance, effectiveness and efficiency of the provisions of the EETS Directive and Decision will be provided in the framework of a separate contract. This short contract is to be signed in May 2015.

E. Other relevant information/ remarks

Annex I: Intervention logic of the ex-post evaluation

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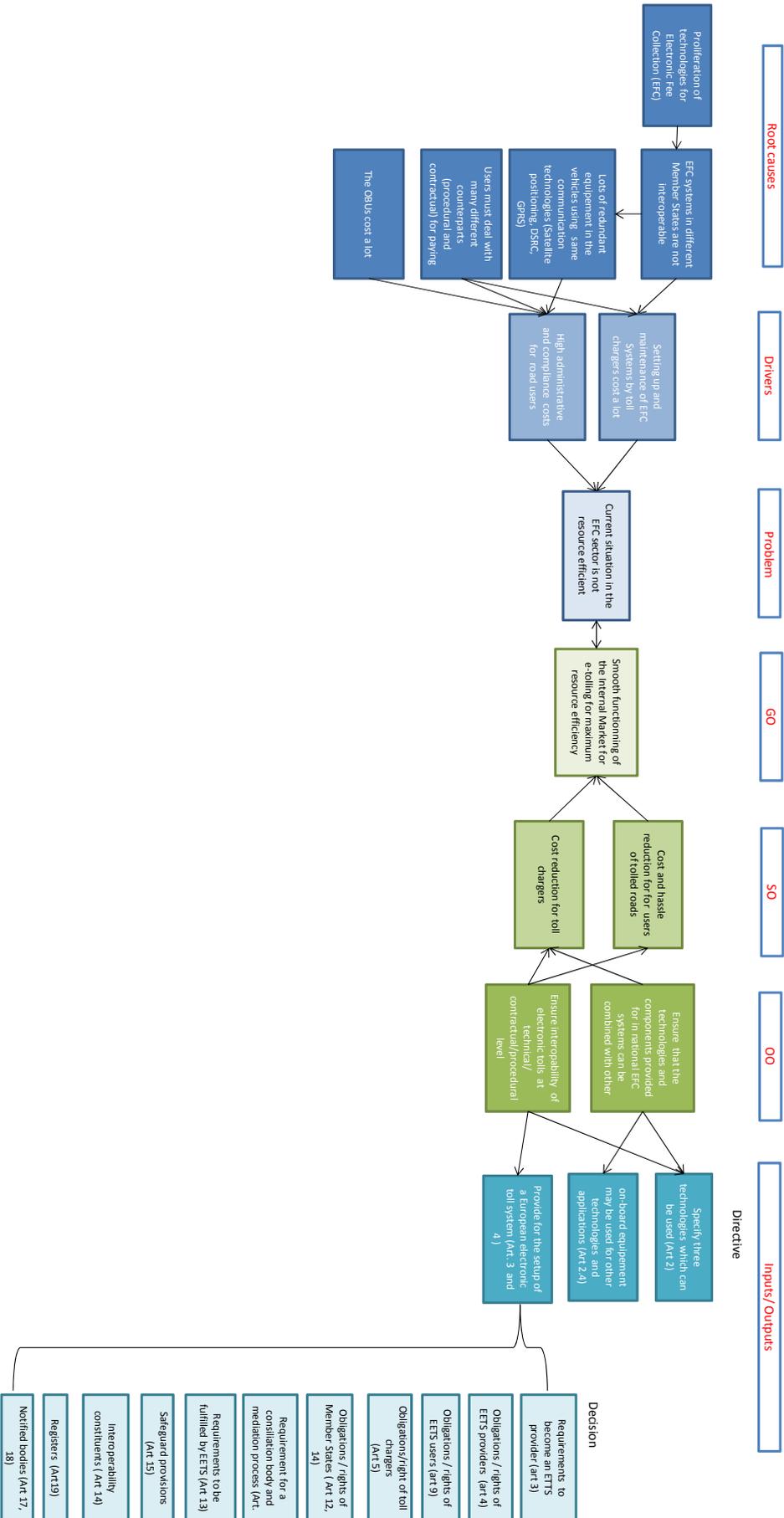


Figure 1: Intervention logic part I: problems and outputs.

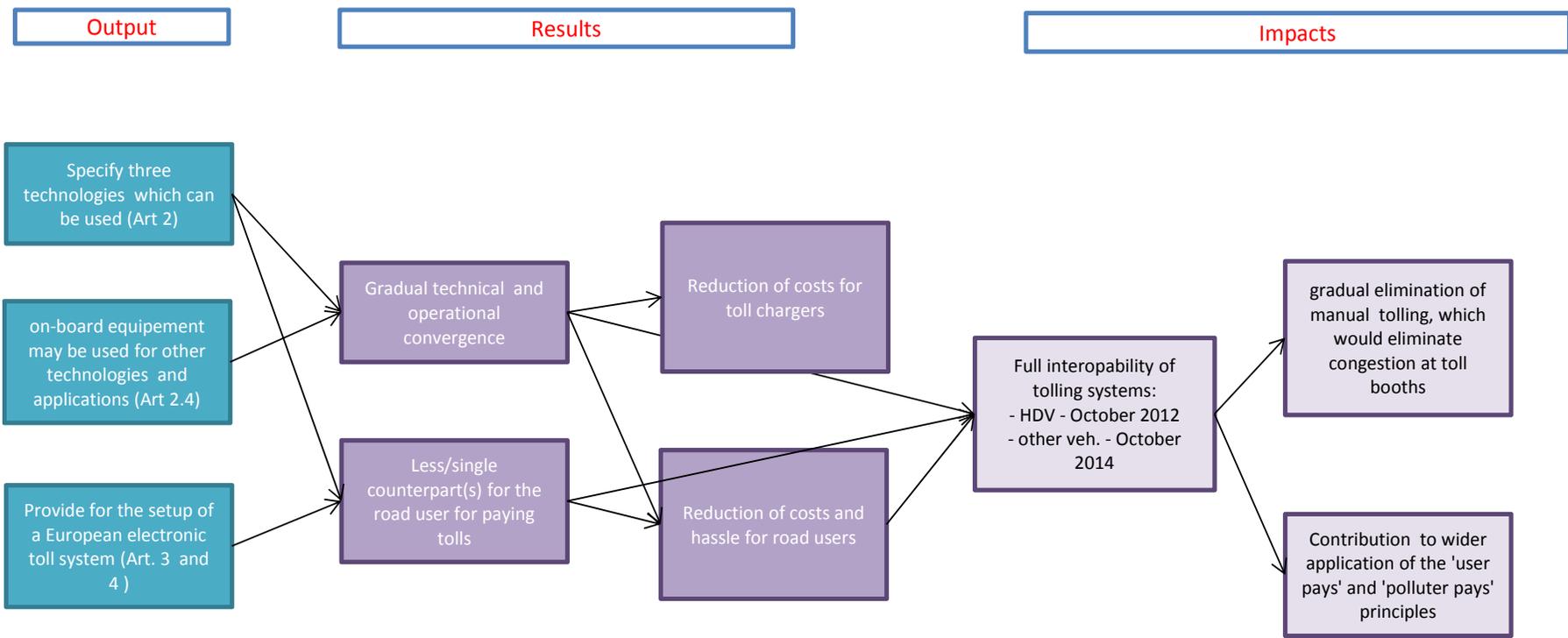


Figure 2: Intervention logic: outputs and impacts.

Results and Impacts: The Directive and the Decision were expected to create the appropriate legal framework for the single European electronic toll service(s) to be provided as a commercial service by third party providers playing the role of intermediaries between road users and the toll chargers in different toll domains.

It was also expected that this legal framework would provide the incentives (notably through standardisation) for gradual technical and operational convergence of electronic tolling in the EU. This in turn would allow industrial economies of scale which would pull the costs of equipment and systems down.

Finally, the interoperability and harmonisation of equipment was expected to bring as obvious consequence the integration of OBUs with other standardised equipment in the vehicle such as the digital tachograph or e-call.

If e-tolling had become cheaper and interoperable as expected, this would have created the potential for:

- the replacement of manual tolls at toll booths by fully electronic tolling, which in turn would eliminate the problem of recurrent congestion at toll booths;

more wide-spread application of tolls on the wider network (not only motorways) and to all vehicles (incl. passenger cars); this would allow true application of the 'user pays' and 'polluter pays' principles to road transport, and therefore for the creation of a level playing field between transport undertakings in road and between the modes.