

Report on

Road Safety Financing System for Poland

FINAL

World Bank

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TABLE OF CONTENTS

ABBREVIATIONS	4
ACKNOWLEDGEMENTS	6
SUMMARY	7
INTRODUCTION	9
1. REVIEW OF THE CURRENT ROAD SAFETY FUNDING IN POLAND	
1.1 Central Budget	11
1.2 Regional and Local Budgets	
1.3 Voivodship Road Traffic Centres (WORD centres)	13
1.4 International Support	13
1.5 Non-Government and Private Sector	14
1.6 National Road Fund	14
1.7 Revenues from Speed Enforcement in Poland	
1.7.1 Central government revenue from speed enforcement performed by the Police	
1.7.2 Central government revenue from speed enforcement by General Road Transport In:	
1.7.3 National Speed Camera Programme (CANARD) Operated by GITD	20
1.7.4 Revenues to decentralized levels of government obtained from enforcement of the tr	
2. ESTIMATING THE ROAD SAFETY FUNDING NEEDS IN POLAND	
2.1. Forecasting trends regarding road safety	23
2.2 Forecasting funding needs to achieve road safety targets	
3. POTENTIAL SOURCES OF FINANCING ROAD SAFETY TO POLAND	25
4. Phase 1 - Priority Proposal - Direct Fixed Speed Camera Income to L	EAD AGENCY
FOR ROAD SAFETY	31
4.1 Income from Fixed Safety Cameras - National Speed Camera Programm	ne (CANARD)
Operated by GITD	
4.2 Enabling multi-annual budgeting for the Lead Agency	
4.3 Secure financing for first year operation of the Lead Agency	
4.4 Lead agency to prepare programs for road safety co-financing with loc	•
units and central government	
4.5 Other Potential Short-term Funding Sources	
4.5.1 Improve effectiveness of funds generated through speed enforcement at decentralize	
 4.5.2 EU co-financing FUNDING SOURCES WHICH COULD BE CONSIDERED ON THE LONG TERM (PHAS) 	
6. MONITORING AND REPORTING SYSTEM FOR ROAD SAFETY EXPENDITURES	•
7. OTHER IMPORTANT CONSIDERATIONS TO GO IN PARALLEL TO INTRODUCTION (
SYSTEM	
7.1 Changing Attitudes and Behaviour	
7.2 Making Road Safety an Element of Other Programmes	
7.3 Roads Programs	
7.4 Children or Education Programs	
7.5 Technology and the Future	
KEV RECOMMENDATIONS	
K H.Y. K H.L. CHVIVIH NI I A. LICUNS	39

ANNEX 1	. CRITICAL FACTORS FOR A SUCCESSFUL ROAD SAFETY PROGRAM	MME.41
1.1	Bringing Road Safety Activities Together into a Lead Road Safety Agency	41
1.2	Understanding the Road Safety Problem	42
1.3	Estimate the Value of Road Death and Injury	42
1.4	A Road Safety Earmarked Budget or Fund	42
1.5	Funding must be Sustainable	43
1.6	Skilled People	43
1.7	Priority Activities	43
ANNEX 2	. PRINCIPLES FOR ROAD SAFETY FINANCING MODELS	44
REFEREN	CES	46

ABBREVIATIONS

ANSV Argentinian Road Safety Lead Agency (Agencia Nacional de Seguridad Vial)

AIS Abbreviated Injury Scale

BDD Bank Danych Drogowych - Road Data Bank

BDWIK Roads and Bridges Research Institute's Integrated Transport Database

CDV *Centrum Dopravního Výzkumu, v.v.i.* - Transport Research Centre in the Czech Republic CEPIK *Centralna Ewidencja Pojazdów i Kierowców* - Central Database of Vehicles and Drivers

CZRSO Czech Road Safety Observatory

DGT Spanish Directorate-General for Traffic

DRL Daytime Running Lights

ERSO European Road Safety Observatory

EU European Commission
EU European Union

EURAP European Structural and Investment Funds
EuroPean New Car Assessment Program
EuroPean Road Assessment Program

GDDKiA General Directorate of National Roads and Motorways

GPS Global Positioning System
GRSF Global Road Safety Facility
GUS Central Statistical Office

GUS BDL General Data Base held by the Central Statistical Office

ICD International Classification of Diseases

IMiGW Instytut Meteorologii i Gospodarki Wodnej - Meteorology and Water Management

Institute

iRAP International Road Assessment Program

IRTAD International Road Traffic and Accident Database/International Traffic Safety

and Analysis Group

ITD Inspectorate of Road Transport
ITF International Transport Forum

ITS Instytut Transportu Samochodowego Motor Transport Institute

MAIC Ministerstwo Administracji i Cyfryzacji - Ministry of Administration and Digitization

MAIS Maximum Abbreviated Injury Scale

MI Ministry of Interior

MID Ministry of Infrastructure and Development

MoT Ministry of Transport

NFZ Narodowy Fundusz Zdrowia – National Health Fund NIK Naczelna Izba Kontroli - Supreme Chamber of Control

NIZP – PZH

Narodowy Instytut Zdrowia Publicznego - National Institute of Public Health (former

PZH – Państwowy Zakład Higieny

NLA National Lead Agency

NRSC National Road Safety Council NRSP National Road Safety Program

OECD Organization for Economic Co-operation and Development

OISEVI Observatorio Iberoamericano de Seguridad Via - Ibero-American Road Safety

4

Draft Final

Observatory

ONSV Observatorio Nacional de Seguridad Vial - National Road Safety Observatory in Spain

PIU Polska Izba Ubezpieczycieli - Polish Insurance Chamber

POBR Polskie Obserwatorium Bezpieczeństwa Ruchu – Polish Road Safety Observatory

RDB Road Data Bank (Bank Danych Drogowych)

RRSC Regional Road Safety Council

RSC Road Safety Council

RSCR Road Safety Capacity Review
RSIS Road Safety Information System

RSO Road Safety Observatory RUM Road User Movement

SCRAS Standing Committee on Road Accident Statistics

SEWIK System Ewidencji Wypadków i Kolizji - Crash Injury Data Base held by Police

SEZAR Road Events Registration System in Warminsko Mazurskie

SNRSC Secretariat of National Road Safety Council

SPIs Safety Performance Indicators

STRADA Swedish Traffic Accident Data Acquisition
SWOV Dutch National Road Safety Research Institute

TEN-T Trans-European Networks - Transport

TERYT Data Base on Administrative Units held by the Central Statistical Office

TRL Transport Research Laboratory
WHO World Health Organization

WORD Voivodship Traffic Training Center

VRA Voivodship Road Authority (ZDW – Zarząd Dróg Wojewódzkich)

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Summary

The tragic consequences of poor road safety are shared by individuals, families and societies. In addition to the human cost of deaths and injury and personal pain involved, road crashes bring costs to the society and country. There is the cost of the crash itself, the ensuing congestion, the cost of emergency services, the cost to the health system and loss of production of those killed and injured.

Road crashes are predictable and preventable and reductions can be achieved if there is adequate determination and motivation which results in a road safety system aimed to prevent the number and reduce the severity of casualties.

Poland has a poor road safety record compared to the rest of Europe and the recent downward trend in deaths and injuries appears to be slowing down. Previous studies have provided a good understanding of the Polish road safety situation. These give the government insight into specific steps which have been applied by other countries for a longer period of time and have proved to lead to better results in road safety. Attaching priority to the issue of road safety both by the governments, but also by the public, is a strong starting point to tackle this problem and it seems that this is becoming the case in Poland. Governments need to give clear recognition of the problem and embark with appropriate policy, institutional and financial changes in order to revert negative road safety trends. Public support to these measures (which are very often initially seen as too restrictive and fiscally led) is necessary to achieve tangible results.

Examples of road safety funding in other countries have identified several 'success factors'. These are not just the provision of funds, but include a strong road safety vision and the motivation to reduce crashes. Other factors include a central road safety organisation that provides a focus for activities, with objectives and targets. Perhaps the most important common success factor is that they all follow a road safety system approach focusing on fact based and result based policies and activities. This requires reliable crash data, in-depth analysis providing a comprehensive understanding of the crash problems, and a centrally managed multi-disciplinary approach to implementing measures.

The review of funding mechanisms used in good performing countries from around the world has identified 16 different sources of obtaining road safety funding and these are discussed in the report. One method of particular interest to the report is the application of income from the fines collected using fixed speed measuring cameras. Given the current financial situation in Poland, it is not likely that a lot of additional funding can be provided to road safety in the short term, so the recommendations focus on optimizing the use of existing funds and setting up the organisational structures and systems that can firstly ensure funds are spent effectively, and secondly can be developed to provide a first class road safety programme in the future.

Fine income from the fixed speed safety camera operations is currently around PLN 60-70 million annually. This is currently going to the National Road Fund and is used for investments in national road infrastructure. It is recommended that this revenue should be diverted into a Road Safety Fund or other ring-fenced multiannual funding mechanism. This

transfer should take place gradually over time and in coordination with the growth of capacity and competence of the Lead Agency. Eventually the whole income from fines related to speeding, estimated at PLN 300 million annually, should be diverted into the dedicated road safety budget or fund. This should greatly increase the capacity of the Lead Agency to deliver results, but also stimulate activities by other key stakeholders which can contribute to prompt improvement in road safety. Other income streams which are identified in the Report are suggested for careful screening and development in the future by the reinforced Lead Agency. They may require much more thorough analysis and discussions with different institutions involved and usually some complex legislative changes for their implementation.

The Report supports the earlier recommendation of setting up a competent and strong National Road Safety Lead Agency to coordinate all road safety activities in Poland. As recommended in earlier reports, in order to adopt fact based and result oriented approach, which are important features of the road safety system, the Lead Agency should have access to all the respective data and be able to analyse such data. To be effective, the Lead Agency will need its own budget and this Report recommends setting up in the short term a Road Safety Fund, either as part of National Road Fund or in another form assuring that the reinforced Lead Agency can use it as a sustainable multi-annual source of funding. It is also recommended that the Fund should be used by the Lead Agency for co-funding activities led by other key road safety stakeholders involved in implementation of the National Road Safety Program 2020.

The most important success factor for road safety in Poland is high level commitment supported by strong Lead Agency equipped with sufficient funding to drive key improvements and stimulate other stakeholders.

Introduction

This study follows from the World Bank Report 78319-PL Country Report on Poland, Traffic Safety Management Capacity Review, published in June 2013. The Capacity Review provided a comprehensive analysis of the road safety situation in Poland and identified areas that need further attention. Poland ranks as one of the least safe countries in the EU with regard to road crashes. While progress has been made in reducing injuries and deaths, the downward trend has slowed and more needs to be done.

There is no doubt that a lack of funding is a barrier to introducing road safety measures, but it is not the only factor. The Capacity Review identified poor crash data and a lack of reliable data analysis and monitoring, which means that currently we do not know how effective any road safety measure is in Poland. In the absence of comprehensive crash data and analytical capacity to track progress and target programs, it is not possible to ensure that road safety funds are spent in the most cost-effective way.

The main findings of the Capacity Review include:

- Lack of accurate and comprehensive crash data and therefore a lack of collision analysis. There is little monitoring or assessment of interventions and therefore there is no assurance that the money that is spent on road safety is getting maximum benefits.
- A lack of a clear road safety strategy with meaningful objectives and targets that are 'owned' by stakeholders.
- Responsibility for road safety is spread over many organisations.
- No Lead Agency where road safety activities are being coordinated.
- No road safety champion to give road safety some political priority.
- Very little public or media interest in road safety.
- No 'ring-fenced' road safety budgets and generally a lack of funding.

This report is part of the technical assistance provided by the World Bank to the Secretariat of the National Road Safety Council and Ministry of Infrastructure and Development.

This technical assistance includes also recommendations on the institutional structure for road safety which would contribute to the achievement of the road safety targets for the country. A financing system cannot be developed or introduced in isolation from the institutional structure, since it equips the structure to implement its program. The road safety financing in this Report is proposed in consideration of the findings and recommendations of the first draft report for institutional development as shared with the authorities in December 2014. When the work on the institutional strengthening is finalized, it would be preferable to revisit the financing recommendations and carry out any additional work to ensure these plans are complementary. It is therefore expected that the recommendations on the financing will receive final confirmation in parallel to the finalization and confirmation of the recommendations regarding the institutional structure.

Given the financial situation of Poland it is not likely that large central budgets are going to be available for road safety in the foreseeable future. We must therefore be practical and innovative in our thinking, and see what alternatives are possible, particularly in the short term, since it is assumed that the Polish government would like to improve the road safety management system relatively quickly to promptly achieve significant progress in the implementation of the National Road Safety Program 2020.

1. Review of the Current Road Safety Funding in Poland

The expenditures on the tasks related to road safety in Poland are currently scattered and financed from the budgets of a multitude of institutions on central and local level while these institutions perform their statutory duties in that area. Discussions with government show that the funds for financing road safety in Poland currently originate from the following main sources:

- 1. Central budget. (3.1)
- 2. Regional and local budgets. (3.2)
- 3. Voivodship Road Traffic Centres (WORD) (fees for driving license examinations, training courses for professional drivers). (3.3)
- 4. Programmes subsidised by the EU and non-EU countries (Norway, Switzerland). (3.4)
- 5. Non-government and private sector. (3.5)
- 6. National Road Fund. (3.6)

Information about amounts spent specifically on road safety by each of the public authorities is not generally available since these expenditures are integrated in other activities. The review of the currently available financing showed:

- scattering of the available funds.
- overlapping of financing for similar initiatives.
- decreased effectiveness of the activities undertaken.
- no possibility for monitoring and coordination of road safety spending in Poland.

The fact that every individual institution defines its own scope of road safety activities causes inconsistencies and gaps, while the absence of any strong Lead Agency causes government and territorial government institutions to define their own areas of activity in isolation. This, not infrequently, leads to overlapping of tasks (e.g. in the area of education and speed control). Also, frequently, the available funds are spent ineffectively for, e.g. suboptimal solutions involving limited resources or activities undertaken based on emotional arguments or current political benefits and not the solid factual data.

The following sections present the details of each funding source so far identified:

1.1 Central Budget

There seems to be only one financing source which is explicitly dedicated to road safety in the central budget and that is the annual budget of the National Road Safety Council Secretariat. This is a rather modest amount of around 4-5 million zloty. The Council uses these funds to conduct activities promoting road safety among all road users, some research and surveys and also to finance its operations.

Numerous institutions and public organisations de facto involved in road safety activities benefit also from the Central Budget but there is no disaggregated information which would inform about the funding allocated specifically to road safety activities. Examples of such institutions that contribute parts of their budgets to road safety include the Police, National Fire Service, General Road Transport Inspectorate, General Directorate for National Roads and Motorways, etc.

The General Directorate for National Roads and Motorways (GDDKiA) has two dedicated road safety programs: 1) to reduce fatalities and 2) program to improve road safety of most vulnerable road users (pedestrians and cyclists). These are funded from the central budget, as part of the overall rehabilitation and reconstruction program for roads. The total amount dedicated to the two programs varies from year to year as presented in the table below. Additionally, selected road safety measures are financed through the budgets for reconstruction and as a result the amounts cannot be identified.

Table 1. Road safety programs implemented by GDDKiA

	2009	2010	2011	2012	2013	2014
Amount	88,906.180	253,568.002	135,511.243	152,642.435	0	116,079.613

Source: GDDKiA

Furthermore, the costs of activities involved in medical rescue services, as well as medical care and rehabilitation of the victims of road accidents, represent a significant burden for the national health care system, but are not estimated⁴. Those expenditures are therefore included in the state budget and are not treated either as a central budget contribution to road safety activities, or as a cost incurred by the State as a result of a lack of effective actions for road safety.

1.2 Regional and Local Budgets

Financing road safety at the regional and local level is provided from the infrastructure investment budgets of the territorial government institutions. Specifically, these are budgets that finance mass transport and land transport infrastructure, as well as other tasks in the area

Draft Final March 9, 2015

11

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⁴ Few attempts were undertaken to estimate those costs, unfortunately as pilot projects only, e.g. National Institute of Public Health-National Institute of Hygiene (NIZP-PZH) conducted such studies within the frameworks of the project Integrated Transport Safety System (ZEUS). For the last few years some progress might have been achieved in this area as part of work undertaken by Institute of Roads and Bridges (IBDiM) for the National Road Safety Council Secretariat in relation to cost of road accidents in Poland.

of transport.

The financing of these budgets is provided mainly from the transfers from the central budget, although for several years now an important role in funding those activities has been played by the funds originating from foreign sources, mainly the European Union. The transfers from the central budget can be grants and subsidies secured to carry out activities related to transport. Special transfers from the State budget mainly concern the tasks related to: elimination of the consequences of natural disasters on roads; allocation of funds to carriers providing national passenger bus transport to finance the statutory rights to discounted fares; and subsidising projects implemented within the frameworks of multiyear programmes – first the "National programme of reconstruction of the local roads 2008–2011", and currently the "National programme of reconstruction of the local roads – stage II". Both programs included road safety criteria in the assessment methodologies.

The transfer of subsidies from the State budget is based on the *Act on revenues of the territorial government units* according to which in the State budget the reserve of the general subsidy is established that is allocated to subsidise:

- Investments on county and voivodship public roads as well as county, voivodship and national roads within the limits of cities with the rights of a county,
- Maintenance of river crossings by ferries (indicated by the minister competent for the issues of transport) with the average traffic density per year exceeding two thousand vehicles per day,
- Rehabilitation, maintenance, protection and management of national and voivodship roads within the limits of cities with the rights of a county.

Currently, there is no separate reporting by regional and local authorities on funds spent specifically on road safety, but discussions with several counterparts confirm that road safety is an element of their investment programs. For example, the ZDM responsible for municipal road management in the City of Warsaw confirmed an annual expenditure on road safety of about 50-100 million PLN. Priority interventions are identified by the Municipal Road Administration using a comprehensive data base regarding traffic management and road safety in the city and also discussions with Police. The data base which allows the analysis of crashes on the network was introduced in 2012 and it uses Police generated data on crashes. The annual costs for the identification of priority road safety measures is estimated by the authorities to amount to 620 thousand PLN annually, and this amount includes costs for the operational use of the database, software updates, risk assessment methodology and audits. The analysis of traffic on 50 intersections is carried out manually, while 100 locations have automatic measurement with systems providing full day monitoring for 10 locations. Although the budget dedicated to road safety has been increasing, the identified needs for investments are significantly higher than the available funds.

Discussions with the Mazowiecki Voivodship Road Authority show that road safety measures are increasingly tackled through the annual budget, but are still at levels below what is necessary. About 5 million PLN are spent annually on improving traffic signalling on the 3,000km network under their responsibility. One specific road safety activity was the activity to improve road safety elements of infrastructure in the vicinity of schools, which was carried out during a three year period and cost 7 million PLN.

The government is currently preparing a new national program, which is expected to have total financing of 1 billion PLN which would be used as co-financing for road investment to decentralized levels of government. Although road safety specific sub-programs are not planned in this new instrument, these measures remain to be one of the selection criteria and some investment will be available.

1.3 Voivodship Road Traffic Centres (WORD centres)

The financial surplus generated from fees charged according to the Law for the examinations and from other business activities conducted by the WORD Centres is required by law⁵ to be allocated to road safety related activities as determined by the director of each WORD Centre. The provisions in the Charters of the individual WORD Centres contain, however, various commitments concerning road safety activities, which result in variable performance of the different WORD Centres. As a result, WORD Centres finance their own scattered projects concerning road safety improvement, including among others, training for children or purchase of equipment for the Traffic Police. Unfortunately, in the case of WORD Centres that do not generate a surplus (as a consequence of the low demographic or other variables), which has been common recently, funds for road safety activities are very small or there are no such funds at all.

1.4 International Support

The European Union provides significant aid to road infrastructure development in Poland. During the years 2007-2013 it planned spending around €20 B EUR for road infrastructure. A similar amount can be expected from the EU for the financing period 2014-20. It also provides financial aid to local and international exchange of knowledge on safe infrastructural solutions, as well as the development of the central programme for supervision of the speed limit (system CANARD - Road Traffic Automatic Supervision Centre) that is currently implemented by the Government. The European Union also sponsors the programme of the European Road Safety Charter, which supports projects for road safety implemented by public institutions, private sector entities and non-government organisations (NGO).

Draft Final March 9, 2015

13

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⁵ Road Traffic Act (Dz.U. 1997 of 98 item 602)

The World Bank also supports the road safety improvement process in Poland. The series of three loans provided to Poland during the years 2005-2011 reached the total amount of \$350 million. These funds were allocated to maintenance and rehabilitation of roads, but also included:

- purchase of speed cameras,
- purchase of alcohol detectors,
- purchase of specialist road rescue vehicles for the fire service,
- purchase of vehicles for the General Road Transport Inspectorate,
- implementation of national public information campaigns,
- treatment of dangerous sites with relatively high levels of crashes.

Switzerland is an example of other donors and other sources of road safety financing. During the period 2013-2014 it financed the road safety specialist training for 350 representatives of the local road administration and Police, supporting the knowledge exchange by making available Swiss good practices in road safety. The funds of the Programme also served to cofinance the programme to purchase new vehicles equipped with video recorders for speed control.

1.5 Non-Government and Private Sector

The road safety situation in Poland is also shaped by numerous private and non-government sector organisations that implement various activities for road safety. Private sector companies (including, among others, manufacturers of vehicles, transport companies, etc.) as well as large non-government organisations (such as for example: Polski Związek Motorowy - Polish Automobile and Motorcycle Association, Automobilklub Polski and Global Road Safety Partnership) and small non-government organisations operated by activists can be included in that category. There are also numerous research institutions and university level schools that may obtain funding from the State and the European Union for research and consulting concerning road safety (those are, among others, the ITS - Instytut Transportu Samochodowego / Motor Transport Institute, IBDiM – Instytut Badawczy Dróg i Mostów / Road and Bridge Research Institute and the NIZP – Narodowy Instytut Zdrowia Publicznego / National Institute of Public Health).

1.6 National Road Fund

The National Road Fund was established to improve the investment processes in road building and effectiveness of the public funds use by supporting the implementation of the government road building programme. Currently, the National Road Fund is the main source of financing for national roads construction in Poland.

The main objective of the Fund is to gather the funds for construction and reconstruction of the national roads. The financial resources of the Fund are allocated to:

- Financing construction or reconstruction of road infrastructure and ferry crossings as well as purchase of vehicle weighing devices;
- Financing the needs related to gathering data on public roads and generating information on the public roads network for road safety improvement;
- Financing construction and operation of the toll collection systems for travel of vehicles (electronic and manual toll collection systems);
- Payments to companies for performance of duties resulting from contracts for construction and operation, or operation only, of a toll motorway, including the compensation for availability of the motorway;
- Financing the costs of consulting services related to construction and reconstruction of the national roads;
- Financing the costs of establishing the special vehicle road company and financing road projects entrusted for implementation to the special vehicle road company;
- Servicing the debt contracted by the BGK to the benefit of the Fund (payoff of the loan with interest and other servicing costs and covering the costs of issuance, interest and buyout of the bonds issued by the BGK to the benefit of the Fund);
- Based on the Act of 28 June 2012 on payment of some unsatisfied receivables of enterprises resulting from the performance of the public orders awarded (Dz. U. of 2012, item 891), a payoff by the General Directorate for National Roads and Motorways of the amounts unsatisfied by the contractor principal receivables of the entrepreneur that made with the contractor a contract related to performance of the public order for construction works, awarded by the General Director for National Roads and Motorways, for completed and accepted works that were performed based on the contract with the contractor.

In addition, during the years 2010-2012, the Fund was used to finance the rehabilitation and reconstruction of the national roads destroyed or damaged as the result of the floods that occurred in 2010. In 2013 the Fund resources were additionally used for financing⁶ some of the rehabilitation of the national roads implemented by the GDDKiA.

The major source of revenues of the Fund is the 80% share from the fuel charge paid on the engine fuels and gas used for fuelling the combustion engines introduced to the Polish market. The duty of paying this charge rests with the manufacturers and importers of engine fuels. This amounts to about 4 billion PLN annually. As of 2014, all the revenues from the Road Traffic Automatic Supervision Centre (CANARD) are also directed to the National Road Fund. In 2014, the revenues from CANARD directed to the NRF amounted to 90 million PLN. Significant sources of the National Road Fund funding also include:

- Funds of loans contracted by Bank Gospodarstwa Krajowego (BGK) for the National Road Fund (NRF) and the revenues from bonds issue organised by the BGK for the NRF,
- Refund from the European funds budget (within the framework of the programmes cofinanced from the European Union funds allocated for road infrastructure),

Draft Final March 9, 2015

15

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⁶ article 34 of the Act of 7 December 2012 on amendment of some acts in connection with performance of the Budget Act - Official Journal of Laws / Dz. U. of 2012, item 1456

- Revenues from the electronic system of toll collection for travel on toll motorways
 managed by the General Directorate for National Roads and Motorways (GDDKiA),
 express roads and selected national roads by vehicles and units of vehicles with the
 allowed gross weight exceeding 3.5t as well as buses ("viaTOLL" electronic toll
 collection system),
- Revenues from travel on motorways managed by GDDKiA of vehicles and units of vehicles with the gross weight of under 3.5 t (the manual system).

Detailed annual financial plans of the Fund are prepared by the state owned Bank of National Economy – BGK (see Table 1 below for the financial flows 2008-2011). They are based on a government program⁷. Each of them is additionally subject to agreement between the minister competent for transport and the minister competent for public finance, in relation to the list of projects supported and the financial size of support for each project. Additionally the opinion is sought from the Minister competent for regional development in relation to funds allocated for implementation of EU co-financed road investments. During the year payments from the Fund for specific road tasks are made based on the General Director for National Roads and Motorways applications by the to the BGK.

Table 1. Financial flows of the National Road Fund during the years 2008 - 2011 (in million PLN)

Item	2008	2009	2010	2011	2012	2013	2014
Fund revenues	3,054.5	14,494.5	19,530.0	26,083.0	25,845.4	13,179.0	17,756.6
Revenues from the charge	1,469.3	1,414,3	2,935.3	3,274.7	3,538.1	3,587.4	3,863.9
Revenues from the EU fun	36.0	85.8	4,944.3	10,437.8	14,282.2	5,297.6	5,187.1
Revenues from contra loan liabilities	373.3	2,238.0	4,166.0	3,190.7	2,494.5	2,617.6	5,314.4
Revenues from issuance bonds	350.0	2,238.0	6,326.3	8,026.4	3,916.7	0.00	1,289.1
Provisional funding	0.00	2,000.0	113.8	0.00	0.00	0.00	0
Revenues within the frameworks of the "Concessions" system	767.0	922.0	901.9	1,031.6	1,305.6	1,507.7	1,572.7
Other revenues	58.9	997.7	141.4	121.7	408.3	168.7	529.4
Fund expenditures	3,019.5	13,440.8	20,066.2	26,246.1	23,286.2	14,269.9	17.977,5
Expenditures on investment tasks, preparation processes and rehabilitation and	1,927.5	10,040.6	16,785.2	23,029.7	18,598.2	10,000.7	6,726,5

⁷ National Road Construction Program for 2011-2015, the Council of Ministers Resolution No. 10/2011 of 25 January 2011r

Draft Final March 9, 2015

16

maintenance of the road network							
Loans and bonds service expenditures	282.4	500.5	2,073.6	1,911.6	2,718.3	2,400.1	9,484.3
Provisional funding servicing	0.0	2,009.4	113.8	0.0	0.00	0.00	0.00
Commissions to the BGK	4.5	4.4	7.4	8.2	8.5	6.0	8.2
Expenditures within the framework of the "concessions" system	760.6	843.9	952.4	1,265.0	1,864.8	1.717,8	1.690,3
Flood consequences liquidation expenditures	0.0	0.0	103.0	0.0	0.00	0.00	0.00
Other expenditures	44.5	42.0	30.8	31.6	96.4	145.3	68.2

Source: reports from activities of the Bank Gospodarstwa Krajowego for the years $2008-2011^8$

1.7 Revenues from Speed Enforcement in Poland

The following entities in Poland have statutory responsibility for speed enforcement in road traffic⁹:

- a) Police and other uniform services¹⁰, carrying out speed enforcement with speed recording devices¹¹ (1900 manual mobile speed measurement devices and 390 cars with speed recording devices installed). These traverse all roads in Poland;
- b) General Road Transport Inspectorate operating the National Speed Camera Programme (CANARD) with 300 devices; and
- c) Communal/municipal police carrying out speed enforcement of all roads except national roads and motorways, using about 200 speed recording devices.

In March 2013, the Minister of Transport, Construction and Maritime Economy signed the Regulation on the conditions for location, method of marking and conducting measurements by speed recording devices. In the Regulation, the requirements and conditions for conducting regular road safety analysis for the purpose of securing location of speed control devices in places in which they would have positive influence on road safety were introduced. Every place in which the speed control device will be positioned on the national road or a lower category road should satisfy the requirements described in the Regulation. With the coming into force of the Regulation, the locations of new speed control devices have to be analysed and agreed with the General Road Transport Inspectorate (GITD) and the relevant Police Commander. The General Road Transport Inspectorate, according to the

⁸ http://orka.sejm.gov.pl/WydBAS.nsf/0/1AFCEEEE3D9C234DC1257ADB003C3913/\$file/Strony%20odStudia_BAS_32-6.pdf

⁹ The magnitude and coverage with activities of that type performed by the last three of the listed entities are marginal and hence they were disregarded in this paper.

 $^{^{}m 10}$ These include: Military Police, Border Guards, and Customs Service.

 $^{^{\}rm 11}$ Data on number of devices as presented for beginning of 2012.

Regulation by the Minister of Transport, has the duty of monitoring and evaluating the influence of the speed control devices on safety in the locations in which they are used for speed limit observation enforcement.

1.7.1 Central government revenue from speed enforcement performed by the Police

In 2013, the Police had 8,299 posts in the traffic police organisational units and the service was provided by 7,556 officers. A total of 6,103 officers were allocated to service on roads, which allowed, in case of service in shifts, maintaining the average number of police officers in daily service on the roads at the level of 3,570 officers.

The catalogue of tasks of the Traffic Police Officer in service on the road encompasses, among other:

- reacting to offences and violations including application of the measures provided by the law,
- performance of the initial activities at the road event (crash) site appropriate to the available means and resources, and reporting the need for assistance of other services to the Police unit officer on duty,
- taking actions aiming at restoring the disturbed traffic flow,
- presenting, on demand by the controlled person, the recording or the result of the (speed) measurement,
- maintaining continuous communication with the officer on duty of the Police organisational unit, immediate reporting of taking up the service on the route or station as well as on the important events occurring during service,
- collecting the comments and proposals concerning actions aiming at improving traffic, safety and traffic organisation, including those concerning the road infrastructure and reporting to the superior.

In 2013, Traffic Police Officers, within the frameworks of road controls, checked documents of 6,367,523 persons; gave a verbal warning to 308,239 persons; issued 2,648,206 penalty tickets for violations; prepared 89,718 applications to courts for punishment for offences; identified 1,488,467 speeding offences; subjected 8,917,980 persons to sobriety tests; identified 83,399 offences and criminal situations concerning driving after consumption of alcohol; and withheld 47,987 licenses for driving vehicles; including 38,698 in connection with driving vehicles after consumption of alcohol. As of December 31, 2013, the Police had 129 marked and 348 unmarked vehicles with video recording devices.

In 2014 the total amount of fines collected through traffic rules enforcement by the National Police amounted to 613 million PLN. This amount is transferred to the central budget.

1.7.2 Central government revenue from speed enforcement by General Road Transport Inspectorate - GITD

In 2013, the Inspectorate had 375 speed control devices, 29 sectional speed control devices, 20 places covered by control of entry on the red light and 29 vehicles with speed control cameras. Although the General Road Transport Inspectorate has authority for speed enforcement on the entire network of roads in Poland, as a consequence of financing the purchase of speed recording devices from the funds allocated to the national roads, the automatic speed enforcement by that entity is carried on the national roads only.

Starting as of July 1, 2011 and until June 16, 2014, the total number of traffic regulations violations revealed using the recording devices operated by the GITD (photographs taken) was 5,428,585 of which 3,195,745 photographs (59%) were qualified for further proceedings and 1,748,240 summonses to vehicles owners ¹²were sent. For various reasons, over 40% of offenders committing traffic offences could not be fined. Foreign registration plates were among the most frequent reasons for rejecting the recordings from the recording devices (45% of all the rejected recordings, almost 19% of all the photographs taken). Unfortunately, the absence of the appropriate fine enforcement regulations and organisational solutions caused drivers of such vehicles to go largely unpunished.

From January until September 2014, as a consequence of using the recording devices, the GITD employees issued the total of 328,000 tickets while during the entire year of 2013, the inspectors prosecuted the drivers 262,000 times. If it is estimated that the average ticket is PLN 250 (the highest is PLN 500 and the lowest PLN 50) this represents the revenues of ca. PLN 82 million. Using the same assumptions, in 2013, PLN 65 million was collected in fines from the drivers¹³.

As the consequence of traffic controls conducted by the General Road Transport Inspectorate in 2013 using recording devices, 1,674,000 photographs were taken that formed the base for initiating proceedings in the cases of an offence (in total the recording devices took 2.5 million photographs in 2013 and 1.9 million photographs in 2014; however it was not possible to initiate the proceedings in cases when the registration plates of the vehicle were illegible, invisible or there were no registration plates, etc.). Based on the collected evidence, after verification, 980,000 summonses to vehicle owners were generated (the bases of negative verification included, among others, foreign licence plates, illegibility of the photograph, two or more vehicles in the photograph, privileged vehicle e.g. ambulance, incomplete owner data from the Central Registry of Vehicles). Based on the statements received by the GITD the total of 262,000 tickets was imposed in 2013 (though the number of tickets issued may include some fines imposed for offences committed during the preceding year).

19

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¹² Such summonses contain the request for completion and return by the owner of the car confirmation of: (i) car ownershiop; and (ii) selection of the variant of the statement i.e. "I was driving the car", "the car was driven by <name and other details of the driver> or "I do not know who was driving, but I agree to pay the fine"; the last one implies slightly higher fine, but without penalty points attributed to any driver;

¹³ Based on media reports and analysis

1.7.3 National Speed Camera Programme (CANARD) Operated by GITD

The Road Traffic Automatic Supervision Centre (CANARD) operated by GITD identifies violations of traffic regulations by means of:

- fixed devices recording vehicles and their momentary (spot) speed,
- devices for section speed control recording vehicles and their average speed computed based on the time needed to travel the controlled road section,
- mobile devices installed in vehicles recording vehicles and their momentary speed,
- devices recording vehicles that do not observe the traffic lights at intersections.

Registration of offences as recorded by the devices are in the form of a photograph containing (among other things) the time and place of the event, the vehicle image with its registration number, recorded and allowed speed. The information represents the base for initiating the explanatory proceedings. All the photographs taken by the speed recording devices belonging to the Inspection are transmitted to the Road Traffic Automatic Supervision Centre and processed only by the dully authorised employees of the General Road Transport Inspectorate.

The choice of location for installation of new speed cameras was as follows. The network of national roads managed by the GDDKiA was divided into sections of from 2 to 10 km in length (in total 5,400 sections). Based on the statistics of accidents, 670 highest risk sections were chosen within which 900 dangerous points were identified. Next, about 360 of the most dangerous locations were identified (at this stage the locations proposed in community applications were also considered).

The next step involved verification of the highest risk locations to identify locations where installation of speed cameras was necessary. Within the framework of that verification, the employees of the Road Transport Inspection reviewed the infrastructure in the given location (they checked, among other things, whether any public utility buildings such as schools were situated in the given place). A specially prepared evaluation checklist was used for evaluation of each location. Vehicle speed checks in the place of the proposed device installation location were also conducted. Consultations were also conducted with the managers of the roads and with local governments. The opinion was obtained from the Police with regard to the possibility and justification for installation of the device in the given location. As the outcome of the above activities and considering the community applications, 100 locations were identified during the first stage of the activities in which the Road Transport Inspection installed the fixed recording devices. In the same way the locations for installation of the devices recording entry on the red light and devices for sectional speed measurement are determined.

Ticket issuance procedure. The photograph with the recorded offence is transmitted digitally to the CANARD system where it is subject to the image analysis process. Based on the registration number read, the enquiry to the Central Register of Vehicles and Drivers (CEPiK) is generated and sent as a form with the request for identification of the person that exceeded the speed. According to *the Act – Road Traffic Law*, in the event that the owner was

not the driver at the time of the offence, the owner or holder of the vehicle should provide the information concerning the person to which the vehicle was lent.

In the form received, the vehicle owner selects one of 3 options:

- 1. He/she indicates him/herself as the vehicle driver at the time of the offence (accepts the ticket for speeding and the appropriate number of penalty points or refuses to accept the ticket and the case goes to court).
- 2. He/she indicates the vehicle driver or another user to whom he/she lent the vehicle (that person gets the ticket for speeding and the appropriate number of penalty points or refuses to accept the ticket and the case goes to court).
- 3. He/she does not indicate the person driving the vehicle (accepts the ticket for not identifying the driver) and he/she does not receive the penalty points or he/she refuses accepting the ticket (and the case goes to court).

After returning the completed form to the General Road Transport Inspectorate, the system generates the penalty ticket which is sent to the mailing address of the offender. The possibility exists of completing the documentation by electronic means using the electronic form.

The amount of the ticket depends on the type of violation and is determined by the following tariff.

Table 3. Fines for speed related violations

	Art. 97 or art. 92 § 1	Exceeding the allowed speed:	Art. 20 or § 27 or § 31 [1]	
36	Art. 92a	Exceeding the allowed speed by:	Art. 20 or art 31 section1 point 1 or § 27, § 31 or § 81	
		Up to 10 km/h	sections 1 and 2 [1]	Up to 50 PLN
37		11 – 20 km/h		From 50 to 100 PLN
38		21 – 30 km/h		From 100 to 200 PLN
39		31 – 40 km/h		From 200 to 300 PLN
40		41 – 50 km/h		From 300 to 400 PLN
41		51 and more km/h		From 400 to 500 PLN

Source: GITD/CANARD

In 2014, CANARD generated about 90 million PLN which were transferred to the National Road Fund.

1.7.4 Revenues to decentralized levels of government obtained from enforcement of the traffic regulations

Revenues obtained from fines imposed for traffic regulations violation are also a potential funding source for road safety. Municipal and communal police have a role (although a limited one) in enforcement of the traffic regulations and it can be authorised to manage programmes in which speed cameras are used. Currently, territorial government authorities are responsible for more than 200 speed cameras positioned all over Poland. Locations where such speed cameras are positioned must be agreed with the Police and the General Road Transport Inspectorate.

According to the Act on the public roads, these revenues must be allocated in whole by the territorial government units to financing the investment, modernisation or rehabilitation tasks related to the road network, maintenance and functioning of road infrastructure and devices, including construction, reconstruction, rehabilitation, maintenance and protection of roads and engineering objects on roads, road safety improvement including popularisation of traffic regulations, educational activities and collaboration on that area with the competent community organisations and non-government institutions.

Communal (Municipal) Police. In 2012, Communal/Municipal Police officers imposed 1.8 million tickets to the amount of PLN 241.6 million. In 2012, the total employment was 9,790 officers and 1,689 administration staff. Communal and Municipal Police units had 333 speed recording devices. Offences against traffic safety reached the number of 1,462,072 of which roughly 80% were speeding and violations revealed using the speed recording devices. In 2013, they imposed 1,481,000 penalty tickets to the total amount exceeding PLN 229.5 million. There were 9,643 officers and 1,769 administration staff. The Communal and Municipal Police units had 391 speed recording devices. Traffic safety offences reached 1,362,487 of which around 940,000 were offences of speeding and those captured using the speed recording devices.

2. Estimating the Road Safety Funding Needs in Poland

Road safety funding needs are directly related to the objectives and targets in the Polish road safety strategy. Estimating this is severely hampered by a lack of understanding of the effectiveness of road safety interventions in Poland and uncertainties in the amounts historically spent on road safety. While death and casualty figures are available, there are no reliable figures on expenditures on road safety, and this is a serious hurdle to make a sound estimate of the relationship between expenditures and road casualties.

In the effort to provide an estimate of the funding needs within the existing serious data limitations, the Bank has estimated the amounts by which the actual estimated numbers of killed and injured will be higher than the target values. In other words we estimate 395 fatalities more than the target in 2020, and 1,615 more serious casualties than the target. Given estimates of the value of saving a life in a road crash in Poland of PLN 2.7 Million, we can estimate that the 'cost' of the excess killed and injured above the target is around PLN 1,567 Million in 2020. A road safety programme that would reduce killed and injured to the target values would therefore be cost-effective up to an expenditure of PLN 1.5Billion a year.

2.1. Forecasting trends regarding road safety

When looking at trends it is generally more reliable to consider the numbers of killed and seriously injured (KSI), as the higher numbers give greater statistical significance. These crashes are also usually recorded more reliably. The graph below shows the trends in killed and seriously injured in Poland covering 2004 to 2013. The national target, as set in the Road Safety Strategy, is to reduce the figure for killed and seriously injured to 7,600 (2,000 killed plus 5,600 seriously injured) by 2020.

If the trend for the period 2004 to 2013 were extrapolated to 2020, the estimate shows that 2020 would result in 8,740 KSI. If, however, the trend for the most recent four years were extrapolated to 2020 (graph below), the estimate shows that 2020 would result in 9,373 KSI. Both these figures are higher than the target 7,600 KSI, suggesting that a significant boost in road safety activities is required in order for the country to achieve the target reductions in casualties.

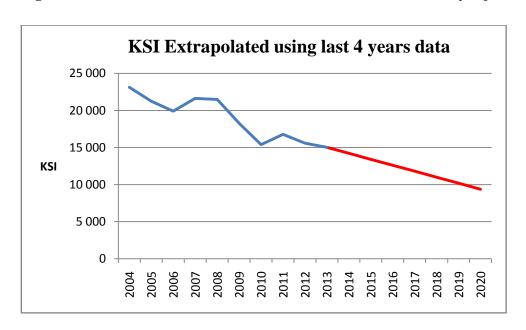


Figure 1: Trend based forecast of reduction in killed and severely injured in Poland

Source: WB analysis based on data from Police SEWIK data-base

The extrapolated crash data show that should road safety activities remain as per the ongoing practices, the target reductions will not be reached. The amount of the shortfall will mean there will be 1,700 people killed and seriously injured every year, over and above the target. Considering the current point in time (five year period available until 2020 to undertake action), there will be five years where the figures will be higher than the target reductions, adding to numbers of killed and seriously injured.

2.2 Forecasting funding needs to achieve road safety targets

More road safety activity is needed if the target reductions are to be achieved and we need a systemic response (structure and organization) that will ensure the required level and sustainability of funding and the proper budget management to ensure value for money and

effectiveness. The shortfall in KSI reductions is large and will require significant additional funding, guaranteed for the future.

Making the most of available funds requires a complete understanding of the road safety situation, which research shows can be obtained by a reliable and comprehensive crash data collection system and a data analysis unit that studies the crash factors. Theses analyses identify specific locations, road user types, weather conditions, the factors causing the crash, etc. The types of crashes that need particular attention can be targeted to give maximum effectiveness of investment.

A more robust analysis of the cost of crashes in Poland would also help the Government to value road safety and give it the priority it deserves. It is also necessary to monitor existing programs and projects to assess their costs and benefits. In this way a cost benefit analysis of road safety interventions can be obtained, which will greatly strengthen the case for more funding.

The preferred approach would be to identify the current level of expenditure on road safety and then estimate the additional budget required until 2020. There is however no financial data available for such analysis. Moreover, the National Program 2020 is a high level strategic document and does not identify amounts needed or planned for investment in road safety specific activities. The rolling bi-annual Action Plans prepared by the Secretariat are not costed either. The Secretariat estimates the cost of only those road safety activities which it is planning to implement directly. This is however, only around PLN 4-5 million per year, almost equally divided to funds for (i) education and media promotions and (ii) analysis and research on road safety related to the Action Plan. Under the current system the Secretariat cannot impose any budget expenditures on the stakeholders' budgets so they practice "task oriented planning" with funding decisions and monitoring (if any) left exclusively to the partner institutions.

Given that the historical total cost of road safety "investments" in reducing KSI is unknown, what can be done at this stage is to calculate a ceiling for the level of cost that will still be beneficial i.e. will be equal to potential economic savings. In the approach proposed we are taking an estimated cost of fatality and serious injury in Poland based on two sets of assumptions. The source for the first one is the World Bank estimate based on international benchmarking referring cost of death and injury to GDP per capita¹⁴. Using this method the cost of death is PLN 2.700 million and cost of injury is PLN 0.700 million.

The second calculation is based on the more recent estimates using SNRSC official cost calculations for 2013¹⁵ which give PLN 1.978 million for a fatality and PLN 2.213 million for a serious injury.

Draft Final March 9, 2015

24

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¹⁴ Estimated Costs of Road Safety Accidents in Poland. Based on iRAP method of costs to GDP ratio, Radosław Czapski, Jarosław Giemza, August 2012; report for the Ministry of Transport and Infrastructure based on research by Kate McMahon, Said Dahdah

¹⁵ Report by the Institute of Roads and Bridges (IBDiM) *Cost of Road Crashes in Poland in 2013*, Nov 2014 available at: http://www.krbrd.gov.pl/files/file_add/download/121_koszty-wypadkow-i-kolizji-drogowych-w-polsce-w-2013-r..pdf

The extrapolation above gives a shortfall of 395 fatalities in 2020 compared to the target, and a shortfall of 1,615 serious casualties. Using the first WB assumptions, this equates to a monetary cost of PLN 1,066.5 million for the fatalities and PLN 1,130.5 million for the serious casualties in 2020, while using the second SNRSC data, the respective costs are PLN 781.1 million for fatals and PLN 3,574.3 million for serious casualties. The total value of estimated savings is therefore PLN 2,197 million using WB assumptions and PLN 4,355 million using SNRSC cost data. Using the SNRSC estimates suggests that a budget of PLN 4,355 million is justified as additional road safety funding, every year, in order to get close to the target casualty reductions and at the same time guarantee that costs will be equal economic benefits. Even with more conservative, WB assumptions such amount equates to an additional road safety budget of PLN 2,197 million a year.

When we compare it with the proposed short-term solution of redirecting fines from fixed speed cameras to an earmarked road safety budget/allocation of the National Road Fund in the magnitude of PLN 60-70 million, which is a fraction of the above "eligible" amount (around 3.2% of the WB estimate and 1.6% of the SNRSC estimate), the justification for such a solution seems obvious. The proposed amount is negligible compared to potential annual savings. Potential Sources of Financing Road Safety to Poland

The Report on Road Safety Funding International Examples presented case studies from countries that have achieved an improved road safety track record through the introduction of a variety of funding mechanisms and institutional set ups. The country cases offer a comparative point of view for Poland to contrast and learn from, and highlight similarities in successful approaches to suggest the essential elements of a financing system which would support the achievement of the road safety targets for Poland. These cases reflect different societal experiences with road safety and points in time when decisions to tackle road safety were introduced.

The commonalities among the countries observed suggest the following important considerations, which this report proposes the Government to adopt:

- a) Good practice countries manage to ensure a **sustainable financing** of road safety measures, which is a core element of their national road strategy and involves a multi-year financing plan. Most often, the core part of this financing is secured from general budget revenues and supplemented through a list of additional revenues.
- b) The management of road financing is entrusted to a **lead agency** which decides on road safety fund distribution to all relevant entities (including decentralized governments and sometimes civil society and professional associations) based on cost-benefit analysis. The lead agencies establish a detailed mechanism to determine the **socio-economic cost of crashes** which are then regularly updated so as to be considered in the cost-benefit analysis.
- c) Road safety expenditure allocations are linked to specific **targets on road safety** and monitoring is regularly maintained so as to ensure the introduction of cost effective measures in road safety. The **monitoring** is most often done by the lead agency.
- d) Good practice countries continuously examine possibilities for additional source generation for road safety though a variety of sources, such as: speed cameras, third party insurance, personalized license plates, etc.

Additionally, the *Report on Road Safety Funding International Examples* identifies 16 potential types of sources of funding for road safety which are detailed below.

Table 2: Sources of funds for road safety

Funding source and description	Benefits to Poland	Possible hurdles to introduce					
1. Central Government budget	1. Central Government budget						
There is already some road safety funding from central Government, mainly via road maintenance and new (safer) infrastructure. Some funding is directed through the roads programme and some	Total control of the size of the programme, so can fit with objectives and targets. Can be committed for a number of years and so made sustainable and long-term actions can be	Direct funding could be assigned to road safety, but more difficult for indirect funding. Reluctance to commit to					
indirect, via the Police etc.	Note - the size of each annual budget total can be varied for long-term budgets. Control of what money is spent on, so can ensure value for money. This funding method provides the	long-term funded programmes – due to future national economic uncertainties. Options how to provide multiannual budget availability should be examined further.					
	back-bone for best practice road safety programmes.	General pressures on spending in times of financial restraint.					
2. Levies on private sector insurance	e companies						
For example, a percentage or fixed amount that insurance companies may have to pay to the dedicated fund or budget account from all the premiums charged on vehicles related insurance	Can work if the levy is 'ring-fenced' for road safety activities that are supported by the public - for example enforcement, to check licences and insurance so that insured drivers do not subsidise drivers without insurance.	Usually resisted by the insurance companies as prices will rise. Potential difficulties with competition if, for example, foreign companies can avoid the levy. It is expected that in July 2015 in Poland the prices is insurances (civil responsibility in traffic) will seriously rise due to					
		introduction of higher (EU's) standards of the product (more rights and better service will be given to the insured car owners). Need for clear communications strategy to					

		build public support.				
3. Profit' from exclusively government-operated compulsory injury insurance.						
Some public sector owned insurance companies may be required to transfer all the profits to a dedicated budget account or fund for investments in road safety.	This would require the state owned company to be more efficient than the private company, which does not often happen without disturbing free competition.	Not possible in Poland as all insurance companies are subject to commercial code. Difficulty with economic fair play and potentially unfair competition. The EU rules for free competition might be a difficulty.				
4. Road user charges, such as fuel e	excise, truck weight taxes, distance	e based charges, or tolls				
This might be a possibility and there may be benefit in linking specific charges with transport related expenditure. For example, it was felt that committing the Congestion Charge in London to finance public transport made the scheme more acceptable to the public.	'Ring fencing' the income is important. Can be a useful source of income as long as the cost of raising the money does not become proportionally excessive.	Impossible in the short term, but to be considered medium and long term. This is a good principle to support and if accepted can be expanded in the future.				
5. Additional fees or levies for set r	oad safety purposes may be added	to road user charges				
Either part of road user charges collected from road users directly or added to fuel price This might be possible in certain circumstances in the medium to long term.	Adding to the fuel price can generate significant income and allow additional programmes that can target road safety topics of public and government interest.	Very unlikely in the short term. But should be considered medium and long term. This will increase transport costs and add to national inflation.				
6. Management of privately operate	ed toll roads					
These are currently self-funding and not profit making. Some profit-sharing mechanisms may generate some funds, so percentage may be considered for road safety.	This can easily be incorporated into the contract and make improving road safety part of the agreement. Some privately managed roads in London have clauses that charge the operator more the higher the number of crashes. This motivates the operator to improve safety.	Not in the short term, but may be considered in medium and long term. Road safety should be part of any new contract for privately operated roads.				
7. Funds from specific road safety related activities such as fines from automated speed and/or red light camera program						
This is an important and viable source of funding for road safety and needs to be investigated. Fines currently go to the national	This income stream forms the major part of the proposal for funding, as expanded in this report.	Revenue currently collected by Central Government, the Police and Local Government. Further				

road fund and there may be benefit in developing a road safety fund as part of the overall road fund. This is discussed further below in section 4. analysis of possible financial flows should be done. All levels of government should be beneficiaries of programs financed by these revenues.

8. A surcharge (an extra amount of fine) may be added to fines specifically for road safety

This is basically increasing fines and using the money for road safety by increasing the government road safety budget. Easily done. Increasing fines can also increase the pressure not to break the law and hence there is a road safety benefit. Not applicable for Poland as this is unlikely to gain support. Earmarking to road safety and transparent investment planning could provide the public needed reassurance of surcharge relevance and support.

9. Donor assistance in the form of loans by International Financial Institutions

Dedicated road safety loans covering funding or co-funding some priority projects This may be possible, but difficult as it involves government loans, which is common in these situations. Additional fund leveraging could ensure implementation of road safety measures as planned.

Theoretically feasible in Poland, but should be discussed with the Ministry of Finance and become part of the borrowing strategy. Poland's national debt is a major issue and actions that increase the debt may face difficulties.

Also difficult to ensure a high priority for road safety in these projects.

10. EU funding to member countries, or Central/Federal Government grants

Some types of road safety projects may be supported as they may qualify for EU funding under different programs agreed with the European Commission as part of the new 2014-2020 financing package.

Some funding has been for research activities and this is valuable as it allows the local road safety funding to be used for measures. Would increase investments on road safety and increase impact potential.

The Lead Agency should make sure to be involved in decision making process related to EU funds for road safety and any bilateral funding provided by specific countries.

11. Private sector (Company) sponsorship and support

These might be possible in certain situations, but will probably be on a small scale and project based. Has potential especially if there is a Lead Agency to provide structure.

Although small scale and often for a defined purpose, it can still be useful to raise the profile of road safety and successful small projects can grow. Not in the short term, but may be considered in medium and long term. Particularly when over time the Lead Agency manages to build some credibility.

12. Road safety programs run by private sector companies

These are possible, but usually part of companies' corporate social responsibility or marketing strategies and often link with a very specific companies commercial interest and small scale.

Can be valuable but not always well designed and/or focussed. Unable to control these programmes, so can be difficult to fit in the road safety strategy and link to objectives.

Unlikely to play any significant role and be consulted with the Lead Agency. Private sector leaders could consider offering support to idea so as to give it prominence. No new Regulation needed.

13. Volunteers and local community groups may support road safety

This is undoubtedly the case, but it is unlikely that any such support will include significant financial elements or necessarily be for actions that have proven road safety benefits. Cannot control these actions and can be problems linking to the roads safety strategy and objectives. A Lead Agency would help, especially if it manages to have an associated charity organisation (1% of personal income tax free to charities)

Coordination, for example by Lead Agency is needed.

14. Road users pay fees and costs for various legislatively required activities for road safety and may go beyond the required levels to improve their own safety

This may also happen on a small scale, but actions will be focussed on individual benefit (rather than benefits for all society), which for road safety may not always give overall benefits. Will require significant consultations and may involve legal complexities

These will often be directed to making drivers and car occupants safer, whereas the major road safety problems are with pedestrians, cyclists and motorcyclists. Nevertheless they can make a contribution.

Not in the short term, but may be considered in medium and long term. Will most likely require legal changes.

15. Government funded activity directly contributes to reducing road danger but is not typically identified as road safety funding.

This occurs and is discussed later in the report under the heading of linking with other policies. Can be part of other general programs such as for example:

- safety at schools
- safe school surrounding
- public health programs (for example in Poland there is National Public Health Programme in which road safety is one of the goals).

Not in the short term, but increased Lead Agency influence over such parts of the budget may be considered in medium and long term.

16. Local-governments budgets (but only for local self-govt run activities). For example Local Authorities can use some of their budget to promote 50-50 funding projects and so bring in more

funding.

There is some locally operated speed camera income that is required to be used for road safety related activities by the respective local government. No possibility to verify it from the government level. Complex legal changes may be required to be able to monitor the revenues and uses of such amounts.

It is more efficient to direct as much funding as possible into the central road safety budget and allow the expenditure to be controlled by the Lead Agency, following the national road safety strategy and objectives.

Some attempts should be made, but the effect may be limited in the short term. Continued effort should be made to increase Lead Agency influence over such parts of the budget in medium and long term.

It needs a strong support for LA as far as knowledge and best practices are concerned

Considering the keen interest in Government to establish a road safety system in the country which would yield results quickly, the analysis involved a prioritization of funding measures which could lead to relevant fund mobilization with less legal and fiscal implications. This should allow a quick provision of funding to the Lead Agency for road safety, thus enabling it to initiate activities on the short term. During time the financing structure would be further developed, to aloe fund generation rom more sources and lead to significant and sustainable financing of road safety.

As a result, the proposed introduction of a systemic method of road safety financing involves two phases. The first one is assessed as feasible (from a legal, institutional point of view) and should be promptly carried out, preferably in parallel with the measures aimed at reforming the Lead Agency. Once initial results show reasonableness of approach and effectiveness, additional financing would be built in the system to support the implementation of the Strategy and by carried out by the continuously reinforced Lead Agency. The above mentioned screening results in the following three groups of financing sources are described in the table below, followed by the detailed description of the possible implementation of the two phases.

Table 3: Short and medium to long-term sources of funds for road safety in Poland

SHORT TERM FUND REDIRECTING MEASURES

Funds from specific road safety related activities such as fines from automated speed and/or red light camera program

Central Government budget

Government funded activity directly contributes to reducing road danger but is not typically identified as road safety funding

Donor assistance

EU funding to member countries, or Central/Federal Government grants

MEDIUM TO LONG TERM ADDITIONAL FUND GENERATION MEASURES

Road user charges, such as fuel excise, truck weight taxes, distance based charges, or tolls

Additional fees or levies for set road safety purposes may be added to road user charges

Management of privately operated toll roads

Road users pay fees and costs for various legislatively required activities for road safety and may go beyond the required levels to improve their own safety

A surcharge (an extra amount of fine) may be added to fines specifically for road safety

Self-governments budgets (but only for local self-government run activities). For example Local Authorities can use some of their budget to promote 50-50 funding projects and so bring in more funding.

Levies on private sector insurance companies

Private sector (Company) sponsorship and support

Road safety programs run by private sector companies

3. Phase 1 - Priority Proposal - Direct Fixed Speed Camera Income to Lead Agency for Road Safety

3.1 Income from Fixed Safety Cameras - National Speed Camera Programme (CANARD) Operated by GITD

Worldwide speed management systems that use cameras generate revenues through the fines paid by the drivers. This money is usually channelled to the State Treasury, but in some circumstances can be used for transport and/or safety purposes. Depending upon the level of fines charged and the numbers of drivers exceeding the speed limits, the income stream can be significant.

In the Polish system, part of those fines, i.e. the ones from the speed cameras system CANARD – Centre for Automatic Traffic Surveillance operated by the General Road Transport Inspectorate – GITD, are currently the revenue directly transferred to the National Road Fund (NRF).

It should be relatively easy to redirect those funds to road safety. It can be done either by establishing a road safety dedicated "sub-fund" of the National Road Fund or assuring that fixed amount of the National Road Fund revenues (or percentage of its total revenues), for example equal to the level of revenues from fines for speeding, becomes available for exclusive use by the Lead Agency to support result oriented activities in the context of the National Road Safety Program 2013-2020.

The speeding related fines collected by Police are another source of revenue to be considered. The difficulty to redirect promptly this source of funding to road safety is that such a solution may be more difficult to implement due to the necessary complex legal rearrangements. Also redirecting it may require a reduction of some other budget expenses to avoid increase in the budget deficit. So it may require consensus within the Polish government. And since the government is currently aiming at a budget reduction such a solution may be considered in the medium term. Moreover, if such an allocation is to be part of the regular state budget it may be more difficult to "ring-fence" those funds for road safety and assure their sustainability over time, since it will be part of the regular annual budgeting process. To address this issue such an allocation may be added to the respective annual allocation for road infrastructure safety improvements on national or self-government roads. It may therefore become part of the regular annual roads infrastructure budget but preferably with very clear and strong road safety objective attached. Alternatively it may be considered to be redirected to a dedicated road safety component of the National Road Fund or a dedicated Road Safety Fund. This solution will have an additional advantage of being "multi-annual" i.e. available for disbursement beyond annual periods for disbursement which are typical for state budgeted expenditures.

The critical issue is what happens to the fines collected. It is recommended that this income stream is directed into a road safety fund or other ring-fenced budget, which should be managed by the Lead Agency. A significant part of the income would need to be returned to the safety camera programme to cover costs and ensure that the programme was effectively 'self funding'.

Complete or significant part of such revenues would be extremely valuable as the core funding of a national road safety programme. With a Lead Agency, this could provide the start of the national road safety management programme funding that could be more impactful and consequently, remove Poland from the top of the list of European countries with dangerous roads.

Our best estimate is that around PLN 325 million are collected annually from offences detected using cameras. This is made up of around PLN 90 million from central government plus approximately PLN 235 million from the local police operations. There are good road safety and economic reasons why this programme should be gradually expanded in the future, especially if a parallel a proper campaign is undertaken to highlight the dangers of excessive speed and the likelihood of being registered and fined.

It is suggested that preferably all of this income should be diverted to the Lead Agency, who would then be able to finance road safety activities resulting from the National Road Safety Program 2020. It may consider also providing some co-funding for investments into improving and expanding speed enforcement and perhaps even consider covering part of the operating costs related to activities of CANARD and Police in relation to speed enforcement operations based on some agreements with the respective institutions. These agreements may be even formulated in such a way to enable covering the direct costs of enforcement (including equipment operations and direct labour costs), and possibly the associated back office and court functions. If such a model is selected, the agreements should also encourage efficiency of speed enforcement and take account of the expansion of the respective programmes. In such a system the Lead Agency may be also in charge of undertaking the

camera site analysis for the whole country and ensure that new sites were placed where the risk is highest.

3.2 Enabling multi-annual budgeting for the Lead Agency

By their nature most road safety measures require implementation over a longer timescale, and as a result ensuring a <u>sustainable funding system for the Lead Agency is as important as</u> its fixed incomes.

In Poland, both central and regional level entities operate using annual programs and annual budgeting. Accrued savings or unspent funds in a specific calendar year are normally transferred to the central budget at the end of the budget year. A few exceptions to this rule were identified, all of which depend on the approval of the Government, including the Ministry of Finance and fulfilment of special conditions. Such exceptions include for example multi-annual Government adopted programs. Alternatively, channelling road safety funds to the National Road Fund (road safety component) or a dedicated Road Safety Fund will also result in a possibility to carry over any unspent funds from one year to another since such financial instruments are by their nature multiannual.

The basic precondition for multiannual financing is the existence of multiannual programming which the financing would be linked to. In the case of road safety, this seems to be exactly the case, as all activities to be implemented by the proposed Lead Agency would derive from the framework multi-annual National Road Safety Strategy, which would additionally be specified in multi-annual programs.

This is one of the key concerns regarding the financing of road safety and the government is encouraged to consider the possibility to ensure the multiannual nature of this financing early on.

3.3 Secure financing for first year operation of the Lead Agency

Absorption of a larger amount of road safety dedicated funds requires a preparedness level on the side of potential beneficiaries (GDDKiA, regional and local entities) which requires time. A gradual increase in fund availability is planned for the Lead Agency, to ensure the realistic capacity to spend increased earmarked funds timely. One option would be to provide funds for the first year of operation of the Lead Agency which would focus on its technical and staff equipping, plus coordination mechanisms with potential beneficiaries. The annual budget of the LA could also finance preparatory activities for project proposals from the potential beneficiaries. The funds would also be used to develop the program for co-financing road safety measures.

Funds would be used to provide timely capacity building to potential beneficiaries during the first year of LA operation and before funds for road safety measures become available from year two.

Since the currently available annual budget of the Secretariat cannot meet the financing needs of a Lead Agency, it is proposed that for the next year of activities of the reinforced Secretariat or new Lead Agency any increased funding for road safety should rather be

channelled through the budget using the targeted reserve of the state budget (pol. *rezerwa celowa*) in agreement with the Ministry of Finance.

3.4 Lead agency to prepare programs for road safety co-financing with local government units and central government

Once the CANARD funds are available to the LA, it would be in position to support both levels of government in the implementation of road safety targeted programs. This would be detailed in the multiyear road safety financing plan for the national program and would serve as a guide to beneficiaries on efficient road safety measures.

The mechanism appropriate to transfer funds to LGUs will need to be identified. Initial discussions about funds used for the construction of sport infrastructure suggest this to be one possible alternative. As in the case of these funds, the LA would announce calls for financing which would be available to LGU upon the satisfactory provision of certain co-financing by the LGU and appropriate methodology in identifying the proposed road safety measures. This approach should improve the appropriate identification of road safety needs and more efficient identification of investments.

The funds could also be used to capacity building in central government, including Police and regional and local governments. Additionally, the LA could work jointly with all beneficiaries in organizing state wide educational programs for prevention.

3.5 Other Potential Short-term Funding Sources

Several other of the potential funding sources listed in the earlier section appear to have significant relevance in Poland and these will be considered in more detail below.

4.5.1 Improve effectiveness of funds generated through speed enforcement at decentralized level

From January until September 2014, as a consequence of using the recording devices, the GITD employees issued the total of 328,000 tickets while during the entire year of 2013; the inspectors prosecuted the drivers 262,000 times. If it is estimated that the average ticket is PLN 250 (the highest is PLN 500 and the lowest PLN 50) this represents the revenues of ca. PLN 82 million. Using the same assumptions, in 2013, PLN 65 million was collected in fines from the drivers¹⁶.

Communal (Municipal) Police. In 2012, Communal/Municipal Police officers imposed 1.8 million tickets to the amount of PLN 241.6 million. In 2012, the total employment was 9,790 officers and 1,689 administration staff. Communal and Municipal Police units had 333 speed recording devices. Offences against traffic safety reached the number of 1,462,072 of which roughly 80% were speeding and violations revealed using the speed recording devices. In 2013, they imposed 1,481,000 penalty tickets to the total amount exceeding PLN 229.5 million. There were 9,643 officers and 1,769 administration staff. The Communal and

Draft Final March 9, 2015

34

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Municipal Police units had 391 speed recording devices. Traffic safety offences reached 1,362,487 of which around 940,000 were offences of speeding and those captured using the speed recording devices.

4.5.2 EU co-financing

Road safety measures in infrastructure, enforcement, education are all recognized relevant priorities for funding in the EU programs. Grant co-financing could be pursued by the Lead Agency so as to amass the funds available to central, regional and local entities for implementation. These funds would be in the optimal case be equal to the funding available from CANARD, so a precondition for a future application would be the secured financing of the Lead Agency.

4. Funding sources which could be considered on the long term (Phase 2)

MEDIUM TO LONG TERM ADDITIONAL FUND GENERATION MEASURES

Road user charges, such as fuel excise, truck weight taxes, distance based charges, or tolls

Additional fees or levies for set road safety purposes may be added to road user charges

Management of privately operated toll roads

Road users pay fees and costs for various legislatively required activities for road safety and may go beyond the required levels to improve their own safety

A surcharge (an extra amount of fine) may be added to fines specifically for road safety

Self-governments budgets (but only for local self-government run activities). For example Local Authorities can use some of their budget to promote 50-50 funding projects and so bring in more funding.

Levies on private sector insurance companies

Private sector (Company) sponsorship and support

Road safety programs run by private sector companies

NOT APPLICABLE TO POLAND

Volunteers and local community groups may support road safety

Profit' from exclusively government-operated compulsory injury insurance

5. Monitoring and Reporting System for Road Safety Expenditures

There is currently no possibility to monitor road safety related expenditures of central government institutions. Budget classification used for government expenditures does not include any specific road safety related codes, which would allow structural monitoring of central level expenditures. Identifying current level of costs incurred by the government is currently possible only by asking all the institutions involved in different road safety activities for identification and reporting their expenses.

The situation is even more complex in the case of different levels of local government. They rarely use tools for budget planning and monitoring, and budget reporting for general monitoring by the Ministry of Finance is based on the general public accounts classification, which does not include road safety specific budget codes.

Although public sector institutions can use additional budget codes for their internal purposes, related to different kinds of their activities, we have not identified any institution that is systematically tracking in their accounting systems road safety related expenditures.

The Secretariat of the National Road Safety Council (SNRSC) made some attempts to identify expenses incurred by different institutions for implementation of projects declared as part of bi-annual Action Plans, but those efforts were unsuccessful. The only expenditures that are clearly attributed as road safety related is the budget of SNRSC. This unit of the Ministry is dealing exclusively with road safety so the total budget of this unit can be qualified as road safety related.

EU funds, which are regularly reported to the European Commission use additional classification based on agreement with EC for the purpose of monitoring and reporting EU co-funded projects and programs. It reflects the structure of the EU co-financed programs. Some parts of this budget may be attributed to road safety, but it requires in depth knowledge of definitions of types of activities included in EU related budget lines.

For several years Poland has been trying to develop a performance based budgeting system, based on the measurable output indicators, by defining road safety related targets or outcomes and attributing budgets to such targets. Many governmental institutions have made an effort to develop their respective performance based budgets, but in practice this new approach is not used for allocating budgets among institutions. This has discouraged budget holders from continuing and fine-tuning performance based budgets. So until this approach is implemented across the whole budget sector, the quality and level of detail of such partial budgets will be limited. So far, however, we have not identified any parameters used for performance based budgeting that may be attributed to road safety and aggregated to estimate total road safety related expenditures by different public sector stakeholders.

Key recommendations for the SNRSC or the future Lead Agency in relation to monitoring and reporting expenditure are:

• Undertake a survey of road safety related expenditures among key road safety governmental stakeholders and at all levels of self-government;

- Participate in performance based budgeting reform to assure that it allows for tracking road safety related expenditures of all relevant stakeholder institutions at the central and self-government level;
- In the short term SNRSC may require:
 - indicative budgets for road safety related tasks as part of preparation of Action Plans in the context of National Road Safety Program;
 - in the beginning of any new budget year to ask for estimated cost incurred by key stakeholders for their road safety related activities in the previous year and budget allocations planned for the new year.

6. Other important considerations to go in parallel to introduction of funding system

7.1 Changing Attitudes and Behaviour

While safety cameras can enforce lower speeds, the results will be much more effective if changing attitudes and behaviours is part of the programme. This should include campaigns that target the knowledge of the public with regard to the dangers of speeding and highlight the pain and suffering caused by crashes and emphasise the risk of being captured when speeding by the continuously expanding system. The aim should be to change the 'social norm' (theory of planned behaviour) and make speeding more socially unacceptable.

In some European countries, including Poland, speed cameras have a poor reputation with the public. There are often claims that they are only for raising money, and drivers react badly to fines and particularly to penalty points and the banning of the worst offenders. This is often supported by media and there is often a general feeling in society that a bit of speeding is not really breaking the law. Since this seems to be also the case in Poland, sufficient efforts should be made to communicate the benefits of the program to the society. In this context the argument of "reinvesting" the fines in improving road safety could be used for such communication. Some other measures, such as the possibility of expansion of driver training ¹⁷ courses focusing on speed and other safety aspects in lieu of penalty points or fines should also be considered.

7.2 Making Road Safety an Element of Other Programmes

As a matter of principle the Lead Agency should make an effort to influence other governmental partners to properly reflect road safety aspects in sectoral or multi-sectoral programs.

Draft Final March 9, 2015

37

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¹⁷ The penalty points or a combination of fine and penalty points can be replaced (at the driver's discretion) with a safe speed awareness driver training course that typically costs more than the fine. This has proven to be popular with the majority of speeding drivers and with good course design can also change the understanding of the driver and their attitude to speeding. After some time the numbers of drivers 'improved' by attending the courses will become significant and all this helps shift public opinion towards making speeding not acceptable by the general public.

The following two paragraphs are just examples of sectoral programs, which are often developed by governments as part of their reform and modernization agendas, but given the very multi-disciplinary nature of road safety and following safe system principles, the Lead Agency should over time develop capacity to influence other governmental programs to properly reflect road safety aspects and reinforce road safety related efforts undertaken under the National Road Safety Program. Such programs can include for example land transport infrastructure; railways (primarily in the context of crossings, but also road safety around railway stations and other railways infrastructure); health programs (with emphasis on emergency services); e-government (for example to assure that data relevant to road safety is easily and automatically accessible); law enforcement and police modernization, and support to self-government owned and managed road infrastructure,

7.3 Roads Programs

Road building and maintenance is an obvious starting place and a lot can be achieved by relatively minor changes to specifications for new roads and maintenance programmes. **Road safety audit** is an important component of road engineering in many countries and prevents unsafe designs being built. This is particularly important when major road schemes are put out to tender and it is critical that road safety audit is a condition of the tender and checks are made on the expertise of the winning contractor.

7.4 Children or Education Programs

One of the most important elements of a road safety programme is with the **education of children**. In many countries this starts at pre-school age (4 years

old), with follow-up training at ages 7 and 11. These early years are very important and are when we form our attitudes and behaviours. These are also very cost-effective programmes as they can influence young people when they reach the dangerous teenage years (especially boys) and make them more likely to behave in a safe manner and follow traffic rules. Teenage road safety campaigns are more likely to be effective when the teenager has experienced road safety education at a young age.

7.5 Technology and the Future

The 4th European Programme for Road Traffic Safety identifies the acceleration of new technologies uptake as part of future road safety measures. Many of these advances will be delivered through safer vehicles and vehicle-borne system (pedestrian identification etc.). Intelligent Speed Adaptation (ISA) is a relatively simple measure to introduce on new vehicles and uses GSP and a digital map of speed limits to allow the vehicle to be kept to the speed imit. The costs are borne by the drivers, except for the provision of a digital speed limit map. These can be provided fairly easily and an ISA programme can deliver excellent road safety benefits at minimal cost to the Government. We recommend this to be studied by the Lead Agency for the future.

Key Recommendations

The following recommendations are developed assuming a timely (within next few months) progress in setting up a National Road Safety Lead Agency (NRSLA), preferably reporting directly to the Prime Minister, with complete overview of all road safety activities. So the solution proposed should be seen as a short-term solution, which should allow the NRSLA to quickly start implementation of priority actions identified as part of the current Action Plan.

The proposed solution, which focuses on redirecting as much as possible of the revenues from speed cameras to NRSLA's responsibility, should be developed in more detail, including legal aspects, and tailored to NRSLA's capacity. Over time NRSLA's budget will need to be gradually augmented through additional revenue sources. The role of NRSLA may be also expanded in relation to the budgets devoted to road safety related activities by other stakeholders. For example NRSLA, which will successfully build its professional capacity and reputation as a reliable and road safety result-focused institution, may be legally empowered to consult the proposed uses of those parts of stakeholders' budgets which would be related to road safety activities. Such an approach, i.e. budget related consultations, can also be useful as part of preparation of bi-annual detailed Action Plans prepared as a tool for implementation of the National Road Safety Program until 2020.

General recommendations (compliant with other ongoing advisory services provided by the World Bank)

- 1. Promote the priority of road safety within Government and with the public.
- 2. Commit to increase road safety funding over time provided the results achieved are positive and preferably linked to measurable and achievable targets.
- 3. Continue development of a crash data analysis unit, managed by and reporting to the Lead Agency; on top of providing regular crash data and programme deliverables monitoring, such a Unit should be helpful in research related to cost-benefit analysis and in improvements of the analysis of economic costs of crashes;

Short-term funding related recommendations

- 1. Divert income from speeding fines collected by CANARD and if possible from other road related enforcement activities to a dedicated road safety earmarked budget or fund for use by the Lead Agency this solution should be able to assure additional annual allocation of around PLN 90 million for the Lead Agency to use in implementation of the National Road Safety Program 2020. Amendments to the respective legal acts such as the law related to the National Road Fund and the Road Traffic Code will need to be developed and processed quickly;
- 2. Ensure preparation of a high level multi-year road safety financing plan for the National Program and more detailed financing plans to become part of bi-annual

Action Plans; this should provide sustainable and foreseeable funding for key road safety related activities, particularly those which are longer than one year and should be continued beyond standard annual budgeting process;

Medium and long-term recommendations

- 1. Continue improvements of road safety funding system the reinforced Lead Agency should continue developing sustainable road safety funding system by regularly screening potential additional sources of financing mentioned in this report, or becoming feasible as a result of new road safety policies. In particular, fines from speed or other traffic related offences collected by Police should be considered for redirecting into the Road Safety Fund; such a solution could increase the annual budget available for National Road safety Program 2020 to the level of PLN 300 million
- 2. Assure road safety aspects are properly reflected in ongoing works on performance based budgeting; for example some key road safety indicators used in the context of the National Road Safety Program should be promoted for use in the budgeting system for budgeting and financial reporting;
- 3. Assure road safety related codes are included in the budget classification for planning and monitoring purposes. If the general budget classification is reformed, representatives of the Lead Agency will need to promote road safety related budget codes to be part of the system. This should allow the tracking of the real level of road safety expenditures and can be used for verifying cost-benefit ratios of different road safety activities; it may provide also a powerful tool for monitoring efficiency of road safety expenditures of different public sector institutions;
- 4. Participate in any public finance related reform that may open the possibility for using multi-annual budgets for road safety.

Annex 1. Critical Factors for a Successful Road Safety Programme

The recent Road Safety Capacity Review concluded that as well as funding problems; there were several critical elements that need to be in place to ensure the programme invests the funds effectively.

1.1 Bringing Road Safety Activities Together into a Lead Road Safety Agency

The Capacity Review identified weak management and organisational links and recommended setting up a Lead Agency for road safety. This Agency should be at highest political level possible and ideally at Prime Minister level. Given the time and complexities involved in establishing a completely new organization to play the role of the Lead Agency, we recommend in the short term strengthening the existing office and improving its capacity by recruiting specialized staff. It is recommended also to consider in this process asking other key central level institutions involved in road safety for delegating suitable and motivated experts and other competent staff to work in such a Lead Agency. If possible in the Polish system, this should preferably be coupled with the quick transferring of some budgets from the "delegating" institutions to cover part of the costs of the Lead Agency.

Analysis of road safety lead agencies funding mechanisms in well performing countries confirms that usually they manage or control significant budget amounts. While ultimately it is suggested that the Lead Agency in Poland should be given control over significantly bigger annual budgets than currently managed by the SNRSC, it has to be done in coordination with the development of Lead Agency capacity to manage it successfully. One additional important difference in the proposed approach is that the use of the budget implemented by the reinforced Lead Agency should be based on a cost-benefit analysis of various road safety alternative projects, to ensure maximum impact. Over time as increased capacity of the Lead Agency evolves, the government may consider additional road safety funding sources. Although many examples of other sources are available from various countries, their applicability to Poland would have to be analysed very thoroughly, as they will most likely require significant adaption.

While it would be useful to mobilize additional funding for road safety in Poland, given the current budget constraints, the proposed short-term change should preferably be introduced by redirecting some of the existing road safety related revenues rather than introducing new revenues. So the objective would be to achieve more road safety benefits by using financial resources in a more cost-effective way.

Having a Lead Agency at a high level will also facilitate more efficient mechanisms for delivering road safety and getting measures introduced. The Lead Agency will also act as a repository for road safety knowledge in Poland and generally be a motivating and facilitating support for central and local level road safety practitioners.

In the long term, road safety funding will hopefully grow and the Lead Agency can grow with it in order to guide and monitor the effectiveness of the road safety related expenditures.

1.2 Understanding the Road Safety Problem

To take forward any road safety programme it is essential that there is a comprehensive understanding of the crash situation. The first step therefore should be to set up a **central road safety data unit** (as part of the Lead Agency) that preferably receives the crash data from the Police, links it to other data, analyses the data and produces regular reports on traffic, deaths and injuries. It should also reinforce a results-focused approach for any safety activities, by undertaking the monitoring of road safety measures (implemented by the key central and local level authorities, but if possible also by other stakeholders), as part of overseeing the implementation of the National Program 2020 measures. Stakeholders should be required to **measure the impact** of their road safety programmes, promote good practices in impact evaluation and undertake cost-benefit analysis of different kinds of interventions. This should follow the pattern "baseline + post-implementation results provide the feedback for future corrective actions". The Data Unit of the Lead Agency should provide the data and support to facilitate this. The Data Unit should also scan research in other countries to give confidence that the road safety measures implemented are effective and giving value for money.

1.3 Estimate the Value of Road Death and Injury

Estimates have been made of the financial cost of road crashes in Poland and of the financial benefits in reducing crashes. This is currently estimated at about 50 billion zloty a year 18. This analysis is undertaken annually for the last few years, but should be reviewed and updated and given strong promotion through the government. The Lead Agency and road safety data unit should prepare business cases for road safety activities, including cost benefit analyses. Historically these have proven to be very favourable and if there is an acceptance of the cost of crashes, measures that reduce these give a high return on investment.

1.4 A Road Safety Earmarked Budget or Fund

Generating revenue is never popular with the public and only becomes more acceptable when there is a specific activity that the monies raised are going to be used for, and the activity is wanted by the majority of people. Road crashes affect a significant proportion of the population and for many it is something that they are motivated to improve, especially where the tragedy has affected their loved ones. Experience in several countries has shown benefits in allocating speeding fines and other transport-related charges into road safety activities.

Such earmarked sections of the public budget should ideally be ring-fenced and put at the disposal of a Lead Agency. So the road safety dedicated Fund or other form of earmarked budget should be ring-fenced as far as possible to assure medium term sustainability of resources available for road safety. Such a fund can provide a reliable and sustainable income stream and provide funding or co-funding for the core of a road safety programme.

Draft Final March 9, 2015

42

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Report by the Institute of Roads and Bridges (IBDiM) *Cost of Road Crashes in Poland in 2013*, Nov 2014 available at: http://www.krbrd.gov.pl/files/file_add/download/121_koszty-wypadkow-i-kolizji-drogowych-w-polsce-w-2013-r..pdf

1.5 Funding must be Sustainable

The Capacity Review identified the importance of having a <u>sustainable funding system</u>. Many road safety measures are implemented over long timescales, often of many years and their effectiveness depends on completion of the programme through to the end. In particular, road safety campaigns are vital in changing attitudes and behaviours and go hand-in-hand with engineering and enforcement to achieve the safer driving behaviour that we are seeking to achieve. Research has shown that these campaigns gain force and momentum over many years and the benefits can be wasted if the programmes are stopped.

1.6 Skilled People

Having good road safety structures, systems and funding are of little value if there are no **qualified and experienced people** to deliver them. If a road safety programme is to succeed it is necessary to attract the right people with the right skills and experience to lead the programme, and more importantly to set up courses and training programmes that ensure intelligent and motivated young people are encouraged into the profession. The Universities should be encouraged to contribute and play a role in this.

1.7 Priority Activities

Given the current lack of reliable, detailed and comprehensive crash data analysis, it will be difficult to promptly develop a very detailed road safety long term action plan that ensures value for money. The current system of rolling bi-annual detailed Action Plans should therefore be continued until the Lead Agency reform is advanced, preferably along with attributed sustainable sources of funding. The difficulty in specific longer-term expenditure planning is particularly true for engineering road safety investment, which requires a detailed knowledge of the collision history at a large number of sites in order to create a cost-effective road safety oriented programme. Moreover a good framework for road safety improvements already exists in Poland¹⁹. There are, however, road safety measures that research in other countries have proven to be effective. Foremost among these measures is speed management and there is a large and robust history of research that shows that **reducing average speeds leads to fewer and less severe casualties**. Meta-analysis of studies across many countries also reveals gains around 4% for each 1mph reduction in speed. There is no reason to believe that such schemes would not be equally as effective in Poland and we recommend having speed management as a major part of the road safety activities in the short-term.

Draft Final March 9, 2015

43

¹⁹ National Road Safety Program adopted in June 2013

Annex 2. Principles for Road Safety Financing Models

The World Bank *Report on Road Safety Funding International Examples* provided as part of this technical assistance project, developed a list of important features that need to be considered when developing a funding model and it is suggested to follow these principles when developing detailed solution for Poland.

- Feature 1: Road Safety Funding must be sufficient for the program of works required.
- **Feature 2:** Road Safety Funding is sustainable.
- **Feature 3:** All sources of funding, as listed above, should be explored as options for supporting road safety in Poland.
- **Feature 4:** Road Safety Funding is certain or at least reasonably predictable.
- **Feature 5:** Thus, create a road safety fund in preference to a roads fund.
- **Feature 6:** Thus, with hypothecation government should be required to commit not to reduce the existing level of core funding.
- **Feature 7:** Road Safety Funding is supported by the community, the media, NGOs, and thus by the politicians.
- **Feature 8:** The business case for road safety funding should be developed, based both on the suffering saved and the real economic saving to be achieved through reduced deaths, injuries, and crashes. The case should also identify the extent to which costs are being borne by Government.
- **Feature 9:** Road Safety Funding mechanisms should alleviate accusations of revenue raising.
- **Feature 10:** Road Safety Funding may be improved by clear elements of social justice and selective adoption of the user pays principle.
- **Feature 11:** Road safety fund expenditure is fully controlled by those responsible for road safety.
- **Feature 12:** Multiple relevant agencies should be funded through the lead agency so that specialist skills and arrangements of the various agencies are harnessed for road safety.
- **Feature 13.** Road maintenance should not be seen as road safety and funded from road safety resources.
- **Feature 14.** Road Safety actions and the funding required for them should be incorporated in the budgets and plans of delivery agencies each year.
- **Feature 15:** Expenditure of road safety funding should be flexible from year to year.

Feature 16: Road safety expenditure by each agency should be separately and identifiably reported in Annual Reports to allow tracking of funds and assessment of BCRs.

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