Joint Position Paper

Financing Infrastructure upgrading & renewals
and common definitions
Introduction

As the representative bodies for infrastructure managers and operators in the road and rail sectors, CEDR and EIM welcome the European Commission’s Proposal for a Connecting Europe Facility (CEF) published on the 6th June 2018. CEF plays a fundamental role in addressing effectively the current and future challenges for the transport sector, in particular for road and for rail. CEF is the financial lifeline of the Trans-European Network Programme, the infrastructure-based European policy directed towards the implementation and development of the European-wide network of all transport modes.

Transport is the backbone of the European economy and society and it has a significant impact on the growth, employment and social, cultural and economic development across Europe. The Single Market would not be completed without transport providing the mobility of the people, goods and businesses across the EU and wider continent. Transport also has a significant impact on jobs: completing the TEN-T Network will create 10 million extra jobs by 2050.¹ Mobility needs will become ever more demanding due to a growing (and aging) European population and moving around Europe gets to be easier and faster.

Ageing infrastructure is a major challenge and concern in Europe. The European cities are some of the oldest on the planet- many roads and railway lines were designed and built in the 19th century, much of the upgrading of the network took place during the 1960s and 1970s and many of the critical sections are currently at the end of their life cycle with a number beyond their initial lifetime expectations. The Infrastructure Managers of CEDR and EIM are committed in renewing, upgrading and maintaining existing infrastructure in order to maintain high levels of safety and high-quality services and to have seamless connections with newly-built infrastructure. Renewing and upgrading the infrastructure will bring significant gains in terms of performance, safety, interoperability, capacity increase and positive effects to the environment.

Upgrades and Renewals

The inability to sufficiently finance Infrastructure Managers for maintenance and renewal of existing infrastructure will be detrimental in achieving the societal and political aspirations for an improved, safer and more sustainable European transport infrastructure.

¹ Cost of non-completion of the TEN-T
Reducing performance of the network due to ageing infrastructure is going beyond simple maintenance requirements as the ‘sticking plaster’ approach is often no longer sufficient. While passenger satisfaction and performance of railways and roads have increased, so has the increase of use and demand for rail and road infrastructure and current levels of performance and reliability are not sustainable, without a sufficient injection of funding for renewal of existing aging infrastructure. Within the context of CEF, CEDR and EIM members accept that maintenance remains the responsibility of infrastructure managers and national governments. However, the commonly agreed pan-European objectives of improved multimodality, of safer and decarbonised mobility and reaping the opportunities of digitalisation go beyond simple maintenance; this will have to be through a coherent policy objective to improve rail and road infrastructure through financing of renewals and upgrading which can serve as a key enabler to decarbonisation of the transport network and improving the services for the road and rail infrastructure users of tomorrow.

Therefore, CEDR and EIM call for an appropriate level and allocation of the CEF 2021-2027 with an earmarked budget for infrastructure upgrades and renewals. Focusing on investments for new infrastructure only will have catastrophic consequences in Europe, especially if the new infrastructure is connected to ageing existing infrastructure. Therefore CEDR and EIM call on the European Union to prioritise investments in upgrading and renewing existing infrastructure. CEDR and EIM remain committed to raising awareness of the serious implications old infrastructure can have on the safety and security of people. Moreover, we call for an increase of the EU budget on digitalisation, namely predictive maintenance and innovative solutions, research and development for new materials, capacities for use and smart technologies.

Grants should be the main tool for renewing and upgrading existing infrastructure to achieve our societal objectives such as decarbonisation and improvement of safety and quality. Blending mechanisms and other financial instruments might bring potential benefits only if they are supported by EU grants and if they bring a return in investments in the mid-term future. Therefore, these instruments should serve as an additional means of financing, and the CEF grants should remain the core of the EU financing of infrastructure upgrades and renewals. Moreover, CEF enhances the European added-value projects, namely the cross-border projects, but we would like to emphasize that not every cross-border infrastructure project has European added value. To prioritize a coherent infrastructure across all regions of Europe, focus should be widened beyond projects on the TEN-T Core Network to also encompass projects on the Comprehensive Network.

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2 Eurobarometer survey
Digitalisation

One common pressing opportunity for mobility and society is digitalisation. However, this can present some immediate challenges for infrastructure managers which CEF funding could help overcome.

CEDR and EIM have the common opinion that digitalisation will influence all aspects of transport. This includes the aspects of traffic operations such as connected vehicles, integrated network management (including intermodality) as well as the planning and management of infrastructure with tools such as Building Information Modelling (BIM) and the Internet of Things. Perhaps more importantly it will influence the relation between transport providers and users. Social media and the transparency of data are increasingly involved in both long-term planning and day-to-day management. The role of digitalisation in the financing of our transport systems is another area of great interest. The internet has revolutionised commerce, but we are still at the beginning of the journey in terms of transport.

With the support of the EU in partnership with infrastructure managers and industry, Cooperative, Connected and Automated Mobility (CCAM) will transform our 19th century network into a 21st system. Connected and Automated Driving (CAD), European Rail Traffic Management System and Automated Train Operations are part of this development provided they are implemented in order to improve policy objectives of safe, reliable, efficient and environmentally friendly mobility.

Background: Common Definitions

Recognising that in many cases there is a lack of clarity and precision in the terminology employed in assessing infrastructure needs and investments, CEDR and EIM have agreed on the following common definitions:

Maintenance:

In general, infrastructure maintenance activities can be broken into three categories:

“Routine works. These are works that are undertaken each year that are funded from the recurrent budget. Activities can be grouped into cyclic and reactive works types. Cyclic works are those undertaken where the maintenance standard indicates the frequency at which activities should be undertaken. Examples are road/track-side verge cutting and culvert cleaning, both of which are dependent on environmental effects rather than on traffic levels. Reactive works are those where intervention levels, defined in the maintenance standard, are used to determine when maintenance is needed. An example is patching, which is carried out in response to the appearance of cracks or potholes.
Periodic works. These include activities undertaken at intervals of several years to preserve the structural integrity of the infrastructure, or to enable the road to carry increased axle loadings. The category normally excludes those works that change the geometry of a road/track by widening or realignment. Works can be grouped into the works types of preventive, resurfacing, overlay and pavement/track reconstruction. Examples are resealing, overlay and reballasting works, which are carried out in response to measured deterioration in road/track conditions. Periodic works are expected at regular, but relatively long, intervals. As such, they can be budgeted for on a regular basis and can be included in the recurrent budget. However, many countries consider these activities as discrete projects and fund them from the capital budget.

Special works. These are activities whose need cannot be estimated with any certainty in advance for instance in the aftermath of particularly disruptive seasonal changes. The activities include emergency works to repair landslides and washouts that result in the road or track being cut or made impassable. Winter maintenance works of snow removal or salting are also included under this heading. A contingency allowance is normally included within the recurrent budget to fund these works, although separate special contingency funds may also be provided.³

Renewals and enhancements (upgrades)⁴ are derived from the Catalogue of the Platform for Rail Infrastructure Managers of Europe KPI Subgroup:

“Renewals mean capital expenditure on a major substitution work on the existing infrastructure which does not change its overall original performance.”⁵ Renewals are projects where existing infrastructure is replaced with new assets of the same or similar type. Usually it is a replacement of complete systems or a systematic replacement of components at the end of their lifetimes. […] It is capitalised at the time it is carried out, and then depreciated. Renewals include planning (incl. portfolio prioritisation, i.e. which renewal projects are realised when and where), tendering, dismantling/disposal of old equipment, construction, testing and commissioning (when road/track is opened to normal or full-speed operation). […]. Excluded are definitely construction of new routes (new systems) or measures to raise the standard of existing infrastructure triggered by changed functional requirements (and not triggered by lifetime!) or "forced" investments when acting on regulations.⁶

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³ Derived from the definitions of the World Bank

⁴ In some countries additional definitions may apply, for example extraordinary maintenance which includes both renewals and enhancements.

⁵ Commission Implementing Regulation (EU) 2015/1100 of 7 July 2015 on the reporting obligations of the Member States in the framework of rail market monitoring, Article 2.

⁶ Source PRIME KPIs Catalogue, slightly modified to accommodate road infrastructure.
Enhancements (or ‘upgrades’) mean capital expenditure on a major modification work of the existing infrastructure which improves its overall performance. Enhancements can be triggered by changed functional requirements (and not triggered by lifetime) or "forced" investments when acting on regulations. The purpose of enhancements is to change the functional requirements such as electrification of a non-electrified line, implementing ITS or C-ITS functionality, widening roads and railways (such as building a second track parallel to a single tracked line) increase of line speed or capacity. Enhancements include planning (incl. portfolio prioritization, i.e. which enhancements projects are realized when and where), tendering dismantling (disposal of old equipment), construction, testing and commissioning (when road/track is opened to normal or full-speed operation)". 

Conclusions

CEDR and EIM agree on the common definitions of maintenance, upgrades and renewals and point out the importance of financing renewals and upgrades of the existing infrastructure. Investing in digitalisation is another crucial aspect of the next MFF and CEF which will bring enormous advantages to the whole transport sector. Grants will remain the main financing tool for the investments of infrastructure namely for renewing and upgrading existing infrastructure. Finally, CEDR and EIM call for the recognition of the importance to finance renewals and upgrades of infrastructure to achieve our societal objectives, promote growth and development across Europe and to complete the TEN-T Network.

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8 Source PRIME KPIs Catalogue, slightly modified to accommodate road infrastructure.
About CEDR

CEDR is the Road Directors’ platform for cooperation and promotion of improvements to the road system and its infrastructure, as an integral part of a sustainable transport system in Europe. Its members represent their respective national road authorities or equivalents and provide support and advice on decisions concerning the road transport system that are taken at national or international level. CEDR’s activities are coordinated in five focus areas reflecting the scope of road authority interests: 1 - digitisation and innovation; 2 - environment and resilience, 3 - safety, operations, mobility and performance, 4 - resources and asset management, and 5 - regulations and harmonization.

About EIM

EIM, the association of European Rail Infrastructure Managers, was established in 2002 to promote the interests and views of the independent infrastructure managers in Europe, following liberalisation of the railway market. It also provides technical expertise to the appropriate European bodies such as the European Railway Agency. EIM’s primary goal is promoting growth of rail traffic and the development of an open sustainable, efficient, customer orientated rail network in Europe. To find out more about EIM, visit [www.eimrail.org](http://www.eimrail.org) or follow us on Twitter @EIMrail.