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Our ref.
IENM/BSK-2013/12885

Annex(es)
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Date 13 February 2013
Subject: ERTMS Railway Map Version 1.0

Dear Chairman,

Please find enclosed the first version of the ERTMS Railway Map (the 'Railway Map'). The Railway Map Version 1.0 explains the current progress in the introduction of ERTMS ('European Rail Traffic Management System') and gives a preview of the further programme. ProRail, as the manager of the main railway infrastructure, and Netherlands Railways (NS), as the largest train operator, were closely involved in the preparation of this Railway Map. The cooperation with ProRail, train operators – and certainly the other stakeholders – during the coming exploratory phase will be of great importance to the successful introduction of ERTMS.

The Railway Map Version 1.0 constitutes the start document for my Multi-Year Programme for Infrastructure, Spatial Planning and Transport (MIRT) start decision to introduce ERTMS. My letter explains the reasons for the preparation of the Railway Map, the most important points in the Railway Map and the further process.

Background

ERTMS is the new international standard for train control, including train protection. The Temporary Railway Maintenance and Innovation Committee (the Kuiken Committee), the House of Representatives, the Government and the railway sector are convinced that ERTMS offers opportunities for the future. For this reason the Rutte I Government took the decision in principle to introduce ERTMS on a broader scale. The subsequent "Building Bridges" Coalition Agreement includes the statement that ERTMS shall be introduced in phases from 2016, within the existing budgets.

This Railway Map Version 1.0 takes the next step towards the phased and controllable introduction of ERTMS. It describes the logical steps to be taken in the carefully-considered introduction of ERTMS in the Netherlands.

The further ERTMS process: towards the carefully-considered introduction

The Netherlands has a densely-used railway system. The Long-Term Railway Agenda (LTSA) set the ambition for the improvement of the railways as a transport product with the ultimate objective of ensuring that increasing numbers of passengers and shippers perceive the train as an attractive transport option and make use of the option. This objective can be achieved only with a further general improvement of the railway system. Safety will be a condition attached to these improvements. The current train protection system will need to be replaced, which offers an opportunity to introduce ERTMS.

ERTMS is the new international standard for train control, including train protection. ERTMS is a new system which offers safety and interoperability benefits.

ERTMS also offers potential capacity, speed and reliability benefits.

The introduction of ERTMS will need to be preceded by a carefully-considered study and decision-making process in view of the complexity of the introduction due to the role played by factors such as the replacement of obsolescent systems, the relationships with other components of the traffic management chain and potential links with other programmes, projects, explorations and needs. It will be necessary to avoid a situation in which scheduling and cost ideals cannot be fulfilled. The introduction of ERTMS must be carried out with great care and the process must be controlled. For this reason studies will be carried out during the exploratory phase to provide the necessary firm substantiation for the many choices that have yet to be made. The exploratory phase will adopt a narrowing-down process to the decision-making in which the plans will be developed from outline to detail and in accordance with the Multi-Year Programme for Infrastructure, Spatial Planning and Transport (MIRT) procedure and the Faster and Better philosophy. This approach will ensure that each decision-making point can give consideration to the availability of sufficient firm substantiation to justify moving on to the next phase. This will be carried out on the basis of formal go/no-go decision-making. ERTMS will be introduced only once it is certain that the risks associated with the introduction are controlled to an adequate extent.

I shall also take the practical experience acquired with ERTMS into account to achieve a carefully-considered implementation of the system. Experience has been acquired both in the Netherlands and abroad. The Dutch experience includes experiences with the delivery of the HSL-Zuid high-speed passenger railway line, the Betuweroute freight railway line and the Hanzelijn railway line. The system installed on the Betuweroute railway line has performed virtually without problems since the summer of 2012. Test journeys carried out on the Hanzelijn railway line were successful. The first test journeys for the ERTMS pilot trial on the Amsterdam-Utrecht railway line were carried out with an ICE train last summer. Within the near future this pilot trial will test freight trains equipped with ERTMS. This will be followed by tests with 10 'Sprinter Light Trains' that are currently being equipped with ERTMS. The pilot trial will continue into 2014. In conclusion, the lessons learnt by Denmark, Belgium and Switzerland will also be taken into account in the preference decision-making.

Modification of rolling stock and infrastructure

ERTMS shall (in part) need to be introduced as a dual system alongside the existing train protection system. This is required as normal rail services must continue whenever possible during the ERTMS implementation period. ERTMS is already available on two corridors (the Hanzelijn and Amsterdam-Utrecht railway lines) in the main railway network. This is in part the reason, in combination with cost considerations, why this Railway Map opts for an introduction which begins with the installation of ERTMS in rolling stock alongside the existing train protection system (dual systems).

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A number of scenarios for the installation in the rolling stock are conceivable. During the exploratory phase these scenarios will be worked out in more detail, both in terms of the content and the financial consequences (the costs, risks and benefits).

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The introduction of ERTMS on the infrastructure is more complex and more expensive than in trains. The exploratory phase will begin with studies and a further detailing of the four search directions for the introduction of ERTMS on the infrastructure as reviewed in the Railway Map. These four search directions are "natural replacement", "rapid replacement", "beginning with routes with a high capacity (need)" and "beginning with routes with a low capacity (need)". A further counterfactual scenario relates to the introduction of ERTMS solely when and where this is required pursuant to European (legal) obligations. During the coming period the search directions will be worked out into scenarios and supplemented with results from studies of their costs, benefits and risks. Pursuant to this start decision I have provisionally reserved € 2 billion for the introduction of ERTMS during the period to 2028 inclusive.

When the new operating concession for the main railway network and the new concession for the management of the main railway infrastructure are prepared I can also incorporate requirements with respect to the implementation of ERTMS. The main railway network operator is, in particular, expected to cooperate with the implementation of decisions that have been made and have yet to be made, whereby financial agreements will be reached on the implementation of ERTMS in rolling stock prior to the date on which the new concession comes into effect.

Within the scope of the Long-Term Railway Agenda, an exploration will also be made of the opportunities available to seek sophisticated combinations with current and planned programmes and projects that can incorporate ERTMS in the design or implementation. Consideration can then be given to the High Frequency Rail Programme and to public transport in the Amsterdam Airport Schiphol-Amsterdam-Almere-Lelystad corridor (OV-SAAL), with explorations of the feasibility of and wishes to, for example, increasing the capacity or reliability of the decentralised railway lines or increasing speeds on a number of railway lines.

In conclusion, a review will be carried out to assess the extent to which the optimisation of the entire traffic management chain – such as, for example, a redesign and improvement of the rail traffic control and disruption management process – in combination with ERTMS could offer benefits including an improvement of the reliability of the railway system. In other words, ERTMS has a very close relationship with other LTSA programmes and projects.

High-potential scenarios

An assessment framework which is harmonised with the Long-Term Railway Agenda assessment framework will be drawn up to appraise the potential of each scenario in an objective manner. The detailed promising scenarios shall need to provide the insight into their costs, benefits and risks required to make a meaningful and justifiable selection of the preference scenario. During the exploratory phase it will also become clear when decisions on which issues can or cannot be made.

Technical briefing

Self-evidently, I am more than prepared to organise a technical briefing to review a number of substantive ERTMS issues in more detail.

Yours faithfully,

THE STATE SECRETARY OF INFRASTRUCTURE AND THE ENVIRONMENT,

Wilma J. Mansveld

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