Summary and conclusions

Question: analysis of differences in indirect effects of NS-offer as compared to earlier negotiated agreement

Due to problems with the V250 rolling stock of the NS (Netherlands Railways) and NMBS (National Belgian Railway Company), since mid-January 2013 a segment of the High Speed Line-South train services cannot be operated in conformance with agreements established in the transport concession. Carriers have proposed an alternative interpretation of their obligations ('the NS-offer'). Studies must be conducted to determine whether this is a proper alternative. In this context, the question is if, with this alternative interpretation, differences in the *indirect* economic effects occur, as compared to the reference situation: the earlier negotiated agreement (ENA) between NS and the Ministry of Infrastructure and the Environment⁹.

Indirect effects only a building block

The qualitative analysis of indirect economic effects conducted by the KiM Netherlands Institute for Transport Policy Analysis is a building block for a set of analyses, tests, and evaluations conducted by various parties. Taken in conjunction, these findings are used to arrive at a comprehensive consideration of the NS proposal. As for the differences found among the indirect effects, no final conclusions can be attached to a wider social costs and benefits perspective, because the inherent influence of direct effects is much greater. Moreover, in the present analysis, no distinction is made between the additional and non-additional indirect effects, as it would already be difficult to analyse a situation with and without high speed line, but this is now certainly the case when it concerns the marginal difference between two operational variants.

Indirect effects differ per region; net national effect smaller than effect in regions

With regard to a transport project's indirect effects, at issue are the effects that occur as a consequence of a better functioning labour market, the image or profile-raising effects that give cities connected by high speed services an advantage compared to other cities, or the effects on the amount of incoming and outgoing tourism. The extent to which indirect effects occur is primarily associated with the extent to which direct effects occur: for example, more people travel, or existing travellers are faster underway. With these extra trips undertaken, or with more free time, people become more productive.

When the advantages and disadvantages of a transport project in the Netherlands differ per location, the associated competitive position of cities within the Netherlands can also change. There is no impact on the national level, but there is regionally. The aim is to describe both the effects nationally and on cities; however, in taking the necessary qualitative approach, it remains impossible to determine the nation-wide effect. It is probable that advantages for the one location in the Netherlands will largely come at the expense of other locations in the Netherlands.

⁹ To prevent the bankruptcy of High Speed Alliance and hence an extremely adverse financial situation for the State from occurring, in 2012 the Ministry of Infrastructure and the Environment and NS signed a negotiated agreement, wherein new agreements were reached pertaining to the implementation of the High Speed Line-concession.

Domestic transport: ENA to a limited extent has more indirect effects

With regard to the domestic offer of high speed services, as of 2017 there are only minor differences between the ENA and the NS-offer; for example, between Amsterdam and Rotterdam, the difference is 68 versus 64 trains per day per direction, and a 3-minute journey time differential diminishing to zero in the last three years (2022-2024) of the concession period. Current forecasts reveal substantial differences in domestic passenger volumes: from 17% in 2017 to 5% in 2024, in favour of the ENA, whereby, owing to somewhat higher frequencies and shorter journey times, more substitutions from the domestic main rail network will play a role. It is relevant to examine the forecasted passenger volumes, particularly in order to estimate the direct effects, which help determine the business case and societal attractiveness of the offer. This KiM analysis does not provide such an examination.

Based on the differences in passenger volumes as outlined above, the indirect economic effects of the ENA for domestic high speed transport in the Netherlands will also be greater than the NS-offer in order of magnitude. This will particularly concern the labour market effects, which will be less in the NS-offer than in the ENA. The difference in labour market effects will occur within the high speed corridor Amsterdam–Rotterdam.

NS-offer: Zuidvleugel and Brabant labour markets slightly merge

Specifically on the Breda–Rotterdam line, the NS-offer provides substantial improvements in the offer to individual passengers, because the high speed surcharge is abolished between Breda and Rotterdam, and the existing conventional Intercity train service Venlo–Den Haag is partially operated on high speed track. This creates for all passengers between Breda and the Zuidvleugel a 15 minute headway connection, while passengers from Eindhoven and Tilburg to Rotterdam also enjoy a journey time gain of eight minutes. There is an inherent disadvantage for the traffic between Dordrecht and Breda, however, because there remains no Intercity train connection on conventional track between these cities. On balance, the NS-offer is expected to lead to a slight merger of the Brabant and the Zuidvleugel labour markets.

International transport: another type of offer, little difference in indirect effects

The *international* train traffic in the NS-offer is of a different nature than that in the ENA. The ENA deploys frequent high-speed trains with seating reservations in the 'mid-price' range operating between Amsterdam, Rotterdam, Antwerp and Brussels. The NS-offer is diversified and consists of high-speed trains with seating reservations in a higher price class (Thalys), combined with a conventional train service operating without seating reservations via Den Haag and Roosendaal or Breda with considerably longer journey times. The forecasted international traffic passenger volumes differ by just a few percent points between the ENA and the NS-offer, whereby the indirect effects will also not differ significantly.

New international connections have some image-effect

The inclusion of a direct high speed train to London can have an image/profile-raising effect for Amsterdam, Schiphol and Rotterdam, but it is only a minor effect, owing to the fact that this connection does not operate more than twice per day. In the NS-offer, Den Haag and Breda have frequent, direct connections with Brussels, which has a positive effect on the image, and the probability to attract Brussels-oriented employers increases as compared to cities that have worse or no connections with Brussels. To a lesser extent this also applies to Tilburg and Eindhoven; their connections with Brussels are better, but it remains necessary to change trains. On the other hand, the improved connection with Brussels can encourage Brussels-orientated employers in Breda and Den Haag to relocate to the major city Brussels, where they can obtain more cluster benefits while also retaining good connections with Breda and Den Haag.

Estimate of indirect effects per location

The difference in indirect effects is not of equal size everywhere. A qualitative estimate results in the per location effects as detailed below in Table S1. As previously stated, it is probable that advantages for one location in the Netherlands will largely come at the expense of other locations in the Netherlands, whereby on balance the national effect is limited. Furthermore, with the increasing size of the agglomeration, the probability of cluster effects occurring also increases, as does the strength of the indirect effects that are a consequence of this.

 Table S1.
 Qualitative estimation of the direction of the difference in indirect effects per location, as based on the situation and forecasts for 2017 and beyond. -: ENA better than NS-offer; +: NS-offer better than ENA. There are no substantial differences in indirect effects resulting in++ or -- scores.

	Labour market effects	Image/profile-raising effects	Explanation
Amsterdam/Schiphol	-	+/0	Less travellers predicted on domestic part HSL-track (p.33); London directly connected (p.34)
Rotterdam	-	+/0	Similar to Amsterdam, but labour market Rotterdam takes advantage of better connection with Brabant
Den Haag	+	+	Labour market in/from Brabant better accessible (p.34); direct connection with Brussels (p.34); business travellers asking for high speed trains might be better off with ENA (see p.28 below The Hague).
Dordrecht	-	0	Labour market in/from Brabant less accessible (p.34); ENA does not include Dordrecht, NS-offer does not include Dordrecht from the year 2017 and later
Breda	+	+	Labour market in/from Zuidvleugel better accessible (p.34); direct connection with Brussels (p.34)
Tilburg/Eindhoven	+	+/0	Labour market Zuidvleugel better accessible (p.34); better connected with Belgium, but transfer in Breda remains, so image effect questionable (p.34).
Roosendaal	0	-	Roosendaal loses direct connection with Brussels

Indirect effects occur later in the NS-offer

For the NS-offer, all the expected indirect effects will occur later than in the ENA. Both the supply of high speed trains and the expected passenger volumes are substantially higher during the years 2014-2016 in the ENA than in the NS-offer.