National Rail Enquiries (NRE)

Response to ORR Consultation on Real Time Train Information

Executive Summary

Thank you for your invitation to respond to your Real Time Train Information consultation issued in December 2012.

We are pleased to see that the consultation reflects the success of NRE's real time licensing. Your summary of the state of the market concludes that "it appears to us that passengers are currently able to choose from a reasonably wide selection of RTTI-based apps" and that the number of suppliers is "... indicative of a market structure likely to contribute to effective competition".

We agree with your statement that rail customers are no longer content with published timetables and want information on the actual running of their trains. At NRE have been pioneering the provision of data and information to passengers for more than a decade. That is why NRE developed real time train information systems that rail customers have been able to use both through the NRE channels and through 3rd party channels powered by NRE developed systems. Through our customer feedback, surveys and research we have continued to innovate. We have developed new systems and new channels so that the rail customer can get the information they need when they want it, how they want it.

Nearly 17M people use the NRE branded services each year and this will be much higher if you include the 3rd party services we power. Public access to rail real time information has never been higher and the quality of that information has never been better.

We have also developed other systems to assist the passenger such as Cheapest fare Finder, Season Ticket Calculator and Print Your Own Timetable. All of these were introduced following customer surveys and all help the passenger to use the network and save money. These innovations have been achieved without regulatory pressure and are there because the free market has been allowed to operate.

We have made many of these systems available to 3rd parties and they have benefitted from NRE funding the developments and taking the risk on these. They get access to ready developed and tested services. NRE has been licensing its services to 3rd parties since 2003, long before the current interest in open access and transparency. We believe this approach and our proven commitment to providing customers with information which best meets their needs has underpinned the successful development to date of the market for RTTI products and services.

However we are not standing still and we have continuous improvement plans driven by extensive customer feedback and surveys. In the last year we have launched innovative smartphone apps as well as a Windows 8 app with an iPad app in development. As well as the customer facing channels we are making continuous improvements to the systems that power these channels. NRE spend over £3M p.a. in systems development

to improve services to passengers. The success of this is seen in the growth of NRE and the growth of rail use.

Since the NRE website was launched ten years ago passenger numbers have increased by over 52% and the most recent National Passenger Survey recorded the highest ever scores for passenger information as part of the highest ever passenger satisfaction score. Previous research has shown that better information provision leads to growth in journeys and that while there are many factors in the growth of rail patronage clearly our services and improvements have played a definite role. One of our drivers is to increase use of rail and we contribute to that with better information not just through our own channels but also through 3rd parties.

NRE feels that it is essential that the information supplied to passengers is of consistent quality to protect passenger's interests. We therefore have a licensing policy in place to assist in maintaining this quality. Darwin is a very complex application taking a number of data feeds and then using heuristic, predictive technology to forecast outcomes. Having spent millions in developing, maintaining and running these systems we feel it is clearly reasonable to want to make sure that others use the systems responsibly and that the licensees contribute to the costs of these systems. The costs have to be paid by someone and it would seem inequitable to expect the fare or tax payer to meet the cost of developing and maintaining these systems for the benefit of developers. The one issue the ORR have raised over pricing was consistency. We believe the latest version of the Code has met that concern.

As part of this consultation we would appreciate clarification on how the ORR will measure the benefits of changes to the Code as per the 2012 NAO report. This investigation started in 2009 and we are still unclear as to how the changes we have made have been measured by the ORR.

We would also appreciate clarification on the ORR's role vis-a-vis the DfT as we raised in our transparency submission last year. Any changes to the licensing model requested by the ORR are likely to impact on costs which ultimately falls to the DfT. We note that the finding of the joint ORR/DfT consultation remain unpublished and clarity in this area will benefit passengers, taxpayers and developers.

In this document we respond to the Consultation in more detail and in the Appendices we answer the Consultation questions and point out areas where there are inaccuracies or where the Consultation document in misleading.

Background

National Rail Enquiries is run by a company called Train Information Services Ltd. It is part of the Association of Train Operating Companies (ATOC), but is owned directly by the UK Train Operating Companies. Unlike TfL or Network Rail it is a private company that receives no public funding. All the developments NRE invests in are run at risk using private funds and the scale of these developments is significant. Tens of millions of pounds of private funding have been invested in quality systems and information in innovative ways to help the customer and, through this, help 3rd party developers. Without NRE continuously developing Darwin, putting up the money and taking the risk, it is questionable whether rail customers or 3rd party developers would have access to such an innovative system.

NRE's innovations have led to a number of world firsts including the real time journey planner, the first in public transport anywhere in the world.

NRE has been involved in transparency for many years. We have been giving 3rd parties access to our systems since 2003. We have also been the leaders in providing information about rail services to the public. We launched real time information 10 years ago to help rail passengers, have added many other services since and have developed numerous channels to access this information. Nearly all the channels are free to access for the end user and the usage suggests success.

NRE branded services now have up to 400M customer contacts p.a. from 17M customers with no advertising of our services. The number of monthly contacts has jumped from 20M to over 30M in the last year. We also provide 420 services to around 150 B2B clients.

The NRE branded channels have been continually expanded since 2003 and now consist of:

- Call centre
- Website
- Mobile website
- iPhone app
- Android app
- Windows 8 app
- SMS
- Twitter
- Facebook
- TV app
- Speech recognition and
- iPad app (spring 2013)

Working for private sector operators NRE is committed to increasing passenger numbers, indeed it is good business, which is why we have invested in these channels. This volume of increase in customer contacts and the widening of services is reflected in results. Since the NRE website was launched ten years ago passenger numbers have increased by over 52% and the most recent National Passenger Survey recorded the

highest ever scores for passenger information as part of the highest ever passenger satisfaction score

NRE has spent tens of millions of pounds in developing a trusted brand and new services, and continue to invest over £3M p.a. in new and improved services.

Given the cost of development, the risks taken by NRE and the ongoing running, maintenance and improvement of the services it is reasonable to expect 3rd party developers who wish to use these services to contribute to the costs, rather than farepayers and taxpayers.

Innovation

NRE has world firsts to its name and is constantly improving existing systems and developing new ones. NRE's success has been built on innovation in response to a thorough understanding of changing customer needs.

NRE seek ongoing feedback (we collect around 100,000 customer surveys p.a. as well as running ad hoc focus groups and other research) and conduct joint research with organisations such as Passenger Focus. We use this feedback to guide and inform our future developments. The growth in the use of our services is evidence of the success of this strategy, and our close relationship with customers has led to a host of new services including:

- T-12 checking and engineering information
- Promotions
- Bulletins and disruption information
- Alternative route maps; social media
- Real Time Info
- Stations Info Database
- Season Ticket Calculator
- Real Time Journey Planning
- Print Your Own Timetable
- National Routing Guide
- Alerting
- Stations Made Easy
- Help Point answering
- CIS feeds
- Onward Travel Posters
- National Service Indicator
- Darwin Timetable Feed
- 'When can I use my OP ticket?'
- Route mapping
- London terminals

Our innovation comes through listening to the customer. Through our existing channels we have unparalleled access to customers to canvas their opinions on existing systems

and what else we should be doing. NRE innovation is focused on what rail customers tell us they want and we believe that is one of the reasons why the customer base of NRE continues to increase at such a rapid rate.

Nearly 17M people use the NRE branded services each year, and many more use our services through the 3rd party services we power. Public access to rail real time information has never been higher and the quality of that information has never been better. Rail customers have also never had access to the information through so many channels giving them the information they need when they want it, how they want it.

This innovation is funded by the TOCs, at risk, and it is clearly reasonable for them to expect 3rd party developers to help fund their costs, even though we do not ask the developers to bear the risk.

We have an ongoing development roadmap of new services and improvements to existing ones. Much of this development is in Darwin and 3rd parties receive the benefit of these improvements without sharing in the cost of development. We don't introduce new charges or increase the existing ones when we improve Darwin.

As part of this development program we are introducing new services to assist passengers to find cheaper fares and to help them with their journeys both in the planning stage and whilst travelling. Many of these customer facing improvements are in our mobile channels giving rail customers better access to information on the move.

NRE is committed to improving services and continuing innovation and plan to maintain our current level of expenditure on developments. However that investment could be put at risk if costs increase due to regulation.

On this point we note that in the Consultation document the ORR is silent on the issue of who pays for any changes to the Code. If changes to the Code do result in increased costs then without proper funding it may lead to a decrease in innovation. These costs could be in the form of reduced revenue and/or increased costs for NRE and the TOCs as well as the reputation of the industry and the undoing of the good work done to date.
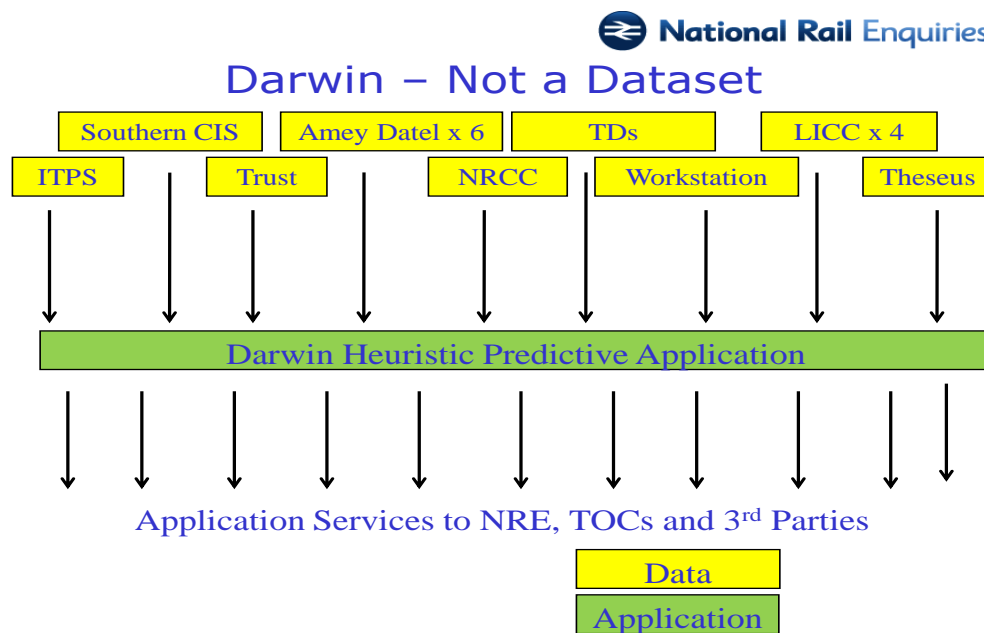
This raises another concern over the role of the ORR. The regulatory creep creates an issue where the ORR are pushing for more transparency but are not fully analysing any additional costs. This can create a situation that will stifle innovation and increase industry costs with no real measure of benefit. Extending regulation will not help innovation and the large number of errors in the Consultation document (the major ones are listed in appendix 2) suggests a lack of understanding not just about the technical issues but also about the commercial issues and the relationship between NRE and developers.

Darwin

The current version of Darwin is the result of 10 years of development involving customer feedback, industry experts and technical expertise. It is not standing still but is constantly being improved with more money set aside for improvements next year.

The description in the Consultation document that Darwin adds "various functionality" to raw data heavily understates the added value which it brings. Darwin in fact provides a significant level of intelligent processing, self learning delays and patterns in order continually to improve accuracy. It provides intelligent output in a variety of ways including an enquiry service that allows it to give answers to specific questions.

As per the diagram below it currently has 17 data inputs only one of which is from NRE. Many of these inputs NRE has to pay for.

National Rail Enquiries

Darwin – Not a Dataset

Southern CIS	Amey Datel x 6	TDs	LICC x 4
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Darwin Heuristic Predictive Application

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Application

The public have had access to this system since it first went live, mostly in situations free to the user. Darwin is used by all the NRE channels ensuring the information is widely available and that it is consistent.

Darwin has been a key part of the strategy to improve the quality and consistency of customer information. This improves public trust in rail and their confidence in choosing rail as a mode. The issue used to be accuracy but now that accuracy has been improved, consistency is the more important issue, Also there is an issue around the safety of passengers. No one wants to see passengers becoming stranded late at night due to poor journey information and we want to ensure that information quality is maintained to help avoid this.

We would not want to see poor information impacting on the rail passenger and, ultimately, rail revenues. The reprocessing of Darwin, such as is usually required with push port, has the potential to create errors. For example if all trains are cancelled from Brighton but the developer using push port makes an error in translation and tells thousands of passengers that train are cancelled from Birmingham then both rail revenues and the reputation of rail will suffer. We have licensed push port but only when there are sufficient safeguards. This is less of an issue with the enquiry service.

The industry is currently investing millions of pounds to meet the further improvement needed. Given this huge investment we wish to ensure that our efforts to help the rail

customer and the industry are not undermined by poor use of real time services hence our licensing requirements and the additional criteria for use of push port.

3rd Party Developers

Developers have benefited from our support of transparency, with many building businesses to exploit commercially the information services we provide.

NRE has been licensing its services to 3rd parties since 2003. To date we have seen limited innovation with most licensees just taking the NRE services and representing them on a different platform with a different user interface to exploit a commercial opportunity. They have not attempted to integrate with other NRE services which would greatly help passengers.

As we have mentioned NRE operate an extensive customer feedback process and this has helped us to understand customer needs and has helped drive our development roadmap.

In order to understand better what developers want, over the last year we surveyed our existing clients and they told us they wanted a less onerous licensing process. In January we held the first of our quarterly developer days and shared our development roadmap. We have also set up a developer forum and been involved in hack days to try to help developers innovate. It is early days but we hope that this will spur the developers on to make better use of our services and help them to help customers with future innovation.

In addition to this we have designed our charging tariff to help developers. We charge per app distributed so there is no upfront charge and the developer does not start to pay until they start to distribute their apps. We are also taking the risk on usage. The app developer pays us a fixed fee when an app is sold and we take the risk on the ongoing demand created by the level of usage it generates.

We feel it is reasonable, given this unilateral investment and unilateral acceptance of risk, for NRE to expect the developers who use their systems to sign up to a quality regime to ensure that the information and systems are not misused to devalue the investment that has been made.

Concerns Raised by the Consultation

There are a number of areas of concern over the Consultation document. We would appreciate a response from the ORR on these points.

In 4.8 ORR reveals that it only received 20 responses some of which are responses to the March 2011 consultation on amending licences, not to this one. Given the millions of rail passengers (as referred to in the ORR press release from Anna Walker) we feel this is a very small response and would question the use of public money on such a lengthy review process (this has been running in various guises for nearly 4 years) with such little public interest. We would like the ORR to reveal how many of these 20 responded

to this consultation rather than the March 2011 on amending licences. Can this information be supplied?

In 4.21 ORR states that Public Bodies should not be subject to the same assessment criteria as private organisations. We note ORR has not explained why it thinks this should be the case and would appreciate an explanation.

We are also concerned over the mention in Annex D of using TOC Licences to regulate the opening up of privately developed IP. Putting aside the inequity of such a move this would not help innovation. We don't believe that developing innovative solutions is an area that sits well with ORR regulation.

However one of our biggest concerns over the Consultation is your objectives in 5.4 and concerns in 5.9. These are centred around small developers but there is no mention of the Public. It would seem to us that the Public should be the primary concern of this consultation but they seem to be ignored in the process. Since the media statements from the ORR are mainly concerned with "public access" we question why the consultation does not include public access in its objectives.

Summary

NRE has invested significant sums in developing, maintaining and running Darwin. This was, and is, achieved through private funding with the private funders taking the risk on success or failure.

The TOCs also bear the prime risk if information is poor or is poorly presented to rail customers.

We feel it is reasonable to expect developers to contribute to the costs and we also feel it is reasonable to expect a high standard from licensees as ultimately the TOCs will pay for licensee errors. We do not feel it is appropriate to move this cost burden onto the fare or taxpayer. It is noticeable in the Consultation document that on the issue of who pays for any changes to the Code the ORR has made no comment.

The record of NRE in the area of transparency shows we are ahead of the game. We were licensing to 3rd parties well before Network Rail or TfL. However we do not benefit from public funding in the way that TfL and Network Rail do placing them in a very different situation from NRE as far as costs and charging are concerned.

We are pleased that the ORR's "State of the Market" assessment states that passengers can choose from a wide selection of real time apps and that the number of apps is "indicative of a market structure likely to contribute to effective competition". Our plan is to build on that and encourage developers to introduce more innovation rather than producing more of the same.

We believe our strategy of developer engagement will lead to an even more effective market than currently exists.

APPENDIX 1

Answers to Consultation Questions

> 1. **We are looking for stakeholder comments on NRE's proposed changes to its Code and where changes have not been made, comments on NRE's reasoning.**

As the ORR are aware the version of the Code that was distributed with the Consultation has now been superseded. We have had comments from developers on these changes and are seeking to incorporate those comments or explain why they cannot be incorporated. We have changed the Code in the areas of defining reputable company, proposed usage, additional services, pricing, additional applications and technical assistance. Because of this we believe this question has now been superceded and progress would be better and quicker were the comments on the Code to come direct to NRE.

If developers are still unhappy with our responses then of course they have the right to revert to the ORR but direct engagement would seem to make the idea of using the ORR as the first point of contact redundant.

> 2. **We are looking for stakeholder comments on the extent to which Network Rail's data feed represents a viable alternative to Darwin and the uses that these feeds can be put to.**

We believe, as the ORR suggest in 5.12, that it is too early to say on this question. Network Rail only provide a data feed whereas NRE gives access to an application that takes 17 data feeds, including the one from Network Rail, and provide a service. They are very different and we will need to see whether developers have the skills to take the Network Rail data and use it in the same way that NRE does in Darwin or if they can find more innovative ways.

> 3. **We are interested to hear consultees' views on the evidence that we present in Chapter 5 on the number of new licences and apps, and on any reasons why they consider this growth might overstate the health of this market. In particular we welcome stakeholder views on:**
>   a. **The medium-term sustainability of the relatively large number of apps that are currently on the market, including the feasibility of paid and ad funded or free to download coexisting; and**
>   b. **The likelihood of a significantly better range of applications and functionality being made available under a more open data standard.**

We concur with the views of the ORR that there is currently a healthy market. However we cannot see how people can accurately answer on the sustainability of this. There is currently a good range of applications in the market but to change the licensing model risks less investment and innovation from NRE thereby ultimately impacting on rail customers and developers.

This information is freely available to rail customers and there are millions of people already using 3rd party applications powered by NRE services. NRE licence their services

currently and have been doing so since well before any ORR involvement. Darwin services are being used by 3rd parties in mobile applications, on websites, on public screens and in kiosks. Millions of people are already using these 3rd party services. Therefore we believe that this information is already available openly.

NRE only contribute small amounts of data to Darwin and, as described before, Darwin is not a database. It would be a serious set back for innovation if the ORR were to consider ordering NRE to hand over the Intellectual Property rights of Darwin or to subsidise developers by funding the service for them. As before, whilst we are doing as much as we can to assist 3rd party developers, it is not our role, nor that of farepayers or tax payers, to subsidise them.

Again we believe this question raises concerns about the level of knowledge and understanding the ORR have on the current situation.

4. ***We ask consultees for views on whether an open data approach, if adopted, would lead to a change in the market for RTTI products and services and if so:***
   a. What this change might look like; and
   b. Whether it would be desireable.

Again this is a difficult question to answer. It is clearly in the interests of 3rd party developers to have services subsidised by NRE. Jonathan Raper has blogged on this on more than one occasion. However as we have demonstrated earlier in our response this isn't free. Any changes to the licensing model risks less investment and innovation from NRE which is likely to be undesirable to both developers and rail customers.

We do not believe it is our role to subsidise 3rd party developers or to improve their margins and the alternative is for this to be funded by the fare or tax payer.
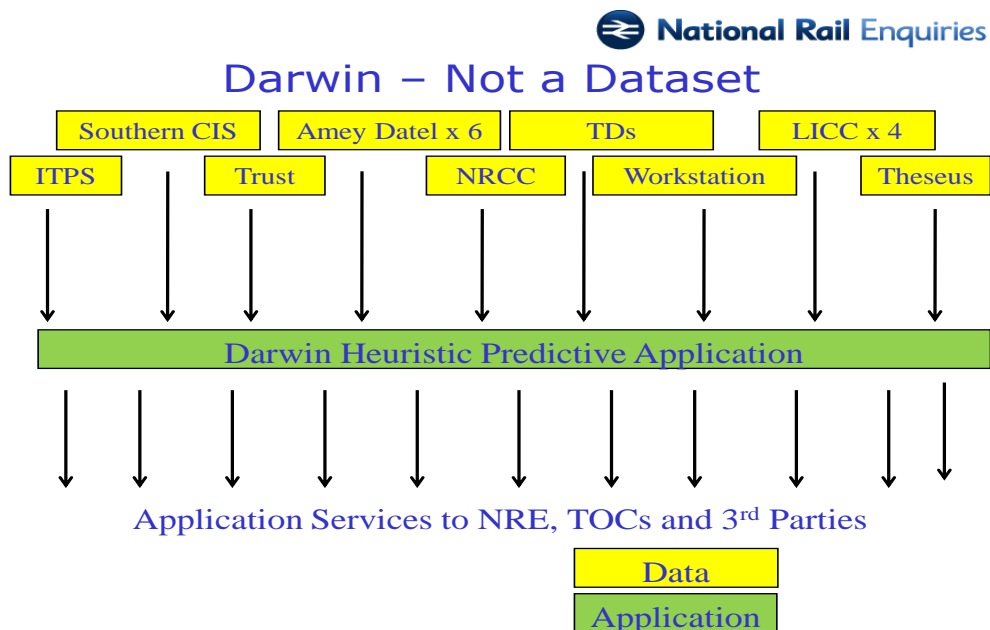
APPENDIX 2

Inaccuracies and misleading implications in the consultation document

Unfortunately we have seen in the document a number of inaccuracies and misleading language that gives the wrong impression and tone to the document.

1. Throughout the document Darwin is described as a database or data. ORR qualifies this with a footnote on page 5 but still continues to use this erroneous description.

    Darwin is not a database nor is it data. NRE takes data feeds from a number of different sources as shown in the chart below. It doesn't just collate this data and it is not static. Darwin takes the data coming in from all the sources and using heuristic, predictive technology predicts future behaviour. It also has the technology to respond to queries on specific train running.

    We have explained this to the ORR on several occasions and we are unsure why ORR continues with this erroneous description.

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2. In 1.3 ORR infers that mobile applications have mainly been enabled by 3rd party developer expertise. You only mention the rail industry as giving "support". This could not be further from the truth. The NRE services power the apps and the queries generated by users go straight to NRE to process and reply. Without the technology in Darwin, indeed if it were just a "database", these applications would probably not have arisen at all and would certainly not have come to market as quickly. We have offered developers a readymade service so that they

have not had to develop the information services: most just provide a user interface.

3. In 1.9 ORR mentions that the rail sector receives around £4Bn of public subsidy. However you fail to mention that the TOCs, who own NRE, are net contributors to the public purse to the tune of £200M p.a. and that NRE receives no public funding at all.

4. In 1.11 ORR compares NRE to both TfL and Network Rail and in 5.25 you state that these organisations "bear similar characteristics to NRE in that the supplier receives revenue from both tax and fare payers". This is untrue as NRE receives revenue from neither the tax or fare payer. We have challenged this assertion in the past and to date the ORR has not been able to provide anything to support it. We are surprised therefore that ORR continues to use this argument and we would be grateful if you could either retract the statement or provide evidence of NRE receiving this funding.

5. In 3.7 ORR understates what Darwin does. ORR says "drawing on this raw information, Darwin adds various functionality..." Darwin does a lot more than add functionality as described in point 1 above.

6. In 4.32 ORR quotes from a respondent that NRE "charges were currently in excess of NRE's costs". In the original investigation ORR saw all the costs of running Darwin, and the fees, so is fully aware that this is untrue. Whilst the organisation that made this comment would not have been aware of the facts the ORR is, so we are surprised ORR made no comment on this given that it knew it was untrue.