



# **FUTURE PAYMENT SOLUTION FOR SWEDISH PUBLIC TRANSPORT**

**A short version of the final report on possible strategies**

*[A report written by Sören Belin, Björn Boldt-Christmas and  
Elisabet Munters on behalf of The Doubling Project.]*

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# Contents

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- 1 Summary ..... 3**
- 2 Recommended direction..... 4**
  - 2.1 Keep to the vision and work in a sustainable and long-term way – this will take time ..... 4
  - 2.2 Make use of time to harmonise the conditions and utilise existing investments..... 5
  - 2.3 Decide whether an interim solution is necessary..... 5
  - 2.4 Prepare ground rules for access to systems ..... 5
- 3 Continued work during Autumn 2010..... 7**
  - 3.1 Develop an action plan within the framework for the doubling work ..... 7
  - 3.2 Establish pay card company strategies ..... 8
  - 3.3 Determine how new players are to be given access to systems ..... 8

# 1 Summary

## **Our most important observations are:**

1. The new legislation places new demands on how public transport companies are to act, and the Government makes it clear in the bill that it expects the sector to develop co-ordinated payment solutions.
2. It will be at least five years before anything useable comes from the activities that are currently in progress in Europe. This means that help from that quarter will be limited in the immediate future.
3. Today's system investments within public transport are too large to be immediately written off – they will have to be used for their entire economic lifetime before the next system generation can be put into use, which is in at least five years' time.
4. The need for interoperability has been solved for the largest flows in terms of volume (the large cities). The volumes in other parts of the country cannot in the present situation justify major investments to achieve full interoperability.
5. Serious problems between both regions and operators in the harmonisation of product conditions, which could also be expected to apply on a national level.
6. Integrated transport is a valuable asset that could be of benefit to the sector provided it can be operated on a competitively neutral basis.
7. The future competition logics are partially undefined as regards access to today's infrastructure, and in particular those systems that already exist for payment and access control. How will the sector handle the integration of new players – as partners or as competitors?

## **Summary of our recommendations**

1. Maintain the goal of a co-ordinated payment solution, work patiently and with a long-term perspective – this will take time.
2. Initiate a keen involvement in ongoing work on a European level in order to be able to influence the next generation of systems. This work will serve as the basis for the next generation of payment systems.
3. Introduce immediately harmonisation activities on the generic product conditions and other important parameters in the sector. This is the basis for all future work on payment solutions.
4. Define a common reasonable goal scenario with regard to interoperability. Conduct therefore a gap analysis for the existing systems to see whether it is possible at a reasonable price to move these so that increased interoperability can be achieved before a new system generation can replace the current one.
5. Evaluate whether you should activate a short-term (not very sophisticated) solution for interoperability between present clusters of systems.
6. Establish a neutral platform for distribution and sales based on integrated transport. Reach agreement with SJ on competitively neutral access to key systems for sales and booking.
7. Co-operate with relevant players to guarantee that the requirements of public transport are met in areas such as pay cards, mobile technology, etc.
8. The sector should act proactively in the face of deregulation with respect to how new players are to have access to existing payment solutions and other relevant systems.

## 2 Recommended direction

### 2.1 ***Keep to the vision and work in a sustainable and long-term way – this will take time***

***The situation requires evolution – there is no way of saving the Travel Card quickly without undermining the investments already made.***

We recommend that the sector should keep to the long-term ambition of a common payment solution. With the overall objective within the sector<sup>1</sup> of doubling the market share for public transport, a common payment solution will be increasingly important.

The basic starting point – from a customer perspective – is probably better than many people spontaneously feel. Within the PTA groupings (clusters) that have invested in a common system, interoperable transport works fairly well. Even though there are a number of simple and manual solutions, it is from a customer point of view manageable in practice. The traffic between clusters is at present very limited, but will gradually increase in step with regional expansion and a growing supply of public transport. On the other hand, it will take many years before the volumes for interoperable services between clusters reach such proportions that they can individually warrant greater investments.

It will take time – more than five years – before a long-term solution is in place. It could well be the case that a European standard is developed on which new systems can be based. Owing to the rapid technological development in general, it is understandable that the goal is variable. Certain techniques that are introduced today are already outdated on the same day they are implemented. And this situation will unfortunately remain the same for many years to come regarding some of the most important areas linked with payment systems. There are a number of technical areas, such as contactless cards (RFID, NFC), mobile telephone payments, etc., that need to mature before becoming a stable platform for long-term investments.

A first choice could be to develop a new solution under our own auspices. This could, for example, be an entirely Swedish form of co-operation or, at Sweden's initiative, invitations to others, for example interested parties from Nordic countries. Since our experience of similar activities is that they always become complicated, delayed and costly, this type of approach should perhaps be avoided. We recommend that the sector turn towards Europe and that it should choose to invest sufficient resources in order to be able to exert a real influence. This requires significant, sustainable and professional efforts on the spot. In reality, a physical establishment in Brussels with a budget covering several years in order to guarantee a sustainable venture, and one that should not be evaluated until after three years.

Other areas that are not clear enough for long-term decisions are the strategies of pay card companies and banks for micro-payments, whose own driving forces tend to be weak. The trade association for the area – the Pan Nordic Card Association –

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<sup>1</sup> Business model for doubled public transport, the Doubling Project

has no clear mandate on this matter, but is willing to co-operate. Here too, time is required to introduce a change process as well as involvement in order to arrive at a solution.

## ***2.2 Make use of time to harmonise the conditions and utilise existing investments***

Bearing in mind the fact that it will take at least five years before there is sufficient potential for new solutions, the sector should, on the one hand, focus on medium-term solutions by using existing investments and, on the other, create the right preconditions for the next generation of system platforms.

The primary efforts in the interim period will thus be directed towards harmonising the generic product conditions that apply within the sector, above all in the customer dimension, so that it is easier to create common product definitions, standards and systems in the future. This harmonisation work should be conducted regardless of the goal for a common payment solution. Today's situation is complicated if we wish to attract new customers, especially if they have to pass frequently through several transport systems on their journeys.

Once harmonisation in the product dimension has been completed, it will be possible to conduct an analysis of how great the cost will be for moving today's systems closer to each other, and by doing this increase the capability for interoperability given today's investments.

The new Public Transport Act requires that there is a common system for passenger information in which all public transport companies are to present the range of services they offer. We feel that the sector should encourage the development of this common passenger information system on Samtrafikens current platform. There are other reasons for this in that Samtrafikens could serve as the basis for a neutral platform in several respects for the sector in the future.

## ***2.3 Decide whether an interim solution is necessary***

If the requirements of the authorities and customers for quick action, despite limited actual demands, are judged to be acute, it would be possible to develop an interim solution.

We do not recommend this option since we feel that a concentrated focus on harmonisation and preparations for a long-term solution are sufficient at the moment. It could be a wise move, however, to leave this option open in case the situation changes.

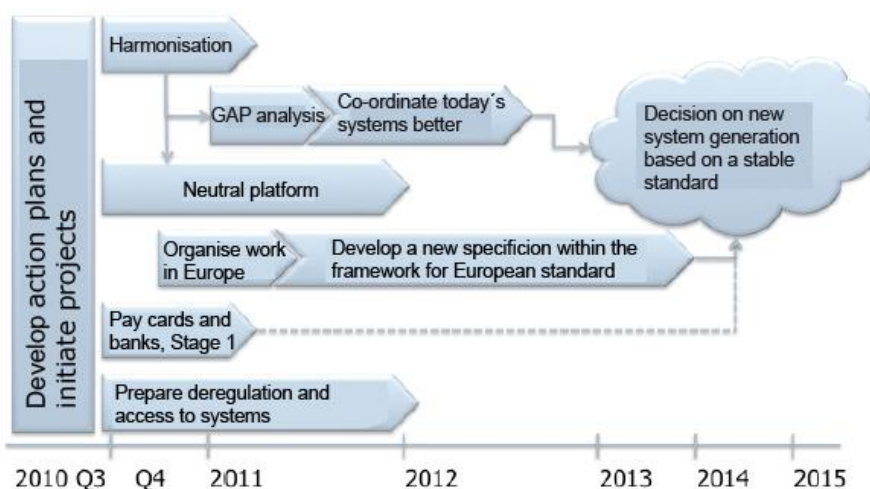
## ***2.4 Prepare ground rules for access to systems***

Many of the consequences of deregulation are unknown, and have not been processed. Ground rules for access to infrastructure, such as those systems that are

included in today's payment solutions, are lacking. The principles that will apply may facilitate matters for new players, but could be regarded as complicating matters for market access.

We recommend that the sector, at an early stage, should develop conceivable scenarios and, with these as a basis, define and reach agreement on the ground rules that should apply from and including 1 January 2012.

### 3 Continued work during Autumn 2010



#### 3.1 *Develop an action plan within the framework for the doubling work*

We have defined an overall structure for an action plan that is to be further developed in the next phase during autumn 2010. The goal is a well documented plan which the sector and other interested parties can relate to over a period of three to five years. Here, a general account is given of the strategic action areas, but work still remains to be done on preparing clear and unambiguous action plans. Such plans must give a clear impression of goals, activities, resources and who is responsible for their implementation. A co-ordinated process will be needed in which the managing directors within today's public transport sector, together with other players concerned with the doubling work, are agreed on the goals, plans, the allocation of resources and a budget. A first step is to set aside funds for a project office (new or part of an existing activity) at which work can be done on developing the action plan.

##### 3.1.1 **Begin work on harmonisation**

The most important work that public transport can focus on in the near future within the framework of future payment solutions is harmonising the most important parameters for a functioning system of interoperability.

##### 3.1.2 **Gap analysis for better co-ordination of existing systems**

Based on the results of harmonisation and existing implementations of the RFK Specification in the various clusters, a gap analysis should be performed. The purpose of this is to determine what can be done and how much it will cost in a

medium-term perspective to improve interoperability. Based on these results, a decision should be taken on what system-related shifts should be chosen for implementation.

### **3.1.3 Create preconditions for a neutral platform based on Samtrafiken**

An important basic activity is, together with SJ, to find forms to ensure that the ownership of or access to key systems for sales and booking (Petra and Stina) can be handled so that all players experience the solution as being competitively neutral.

Assuming successful negotiations with SJ, a business plan for Samtrafiken should be developed.

### **3.1.4 Establish an organisation for co-operation with Europe**

If the sector decides to involve itself in European work in a serious way, a separate project will have to be set up during the autumn. Initiating this project and manning a permanent representation in Europe will extend over a period of several months after the decision. The measures are described in greater detail in Section 5.3 on page 15.

## ***3.2 Establish pay card company strategies***

In our initial contacts with the pay card sector and the banks via Pan Nordic Card Association (<http://pan-nordic.org/>), we have received positive signals to the effect that they want to be involved in work this autumn on the action plans. We have described the present situation and initial wishes of the public transport sector. However, the sector should prepare itself and specify in more detail its basic starting point and requirements.

## ***3.3 Determine how new players are to be given access to systems***

Access to systems (not only payment system components) will control how new players establish their operations and define their products. If we assume that the harmonisation work (3.1.1 and 3.1.2) is successful, there will be payment solutions that function satisfactorily. The sector should work out a number of access scenarios and, with these as a base, draw up a set of regulations for access to present and future payment systems. These regulations must be clear and transparent. It must also be decided how conflicts are to be solved within the area. Establishing this will take time, so it would be a good idea to start the work at an early stage so that the fundamental principles are established in good time before deregulation takes place.