Swedish National Tax Board Preparations for the Euro Situation Report 2 2000:7

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Summary

The National Tax Board (RSV) herewith submits to the Government its second Situation Report on RSV's preparations for the euro. The first report was submitted to the Government in September 1999 (RSV Rapport 1999:12; Riksskatteverkets euroförberedelser - en lägesrapport). A number of the questions which are contained in the Government's instructions of 19 August 1999 were answered in the first report. In several places in this memorandum, therefore, there are references to the previous report, which is also appended.

In order to benefit from the experience of others, RSV has in recent years built up a network of euro contacts both in Sweden and with the other Nordic countries, the UK and the Netherlands. For the continuation of this preparatory work it is important to maintain and develop these channels of contact, and also to monitor what is happening in other EU countries.

RSV Report 1999:12 contains a review of IT systems and of statutes in the fields of taxation and enforcement. RSV is of the opinion that - even if no decision has yet been taken on membership of the currency union - it is important for work on legislative matters to begin within the government departments as this forms the basis for adaptation of IT systems.

RSV also believes that it is very important from the point of view of RSV business for decisions to be taken with regard to decimals, rounding off and standard amounts. Both in RSV Report 1999:12 and in the current report, RSV has proposed guidelines and made recommendations concerning these matters. RSV assumes that they will be dealt with by the Government in the course of the continued legislative work which RSV has proposed should now begin.

The technical information systems in RSV's divisions are controlled, particularly on the taxation side, by very comprehensive and complex rules. RSV's IT systems, which are among the largest in the country, presuppose comprehensive arithmetical calculations and are based on a very frequent communication of amounts to and from individuals and companies. A changeover from Swedish kronor (SEK) to euros (EUR) means not only major adaptation of the IT systems but also considerable changes to forms, external and information material, internal job descriptions etc.

RSV also considers it important to make the point that a changeover to the euro must take place at the turn of a year. There were more detailed comments on this in RSV Report 1999:12. The end of any transitional period must similarly be at the end of year.

RSV's complex systems environment will probably necessitate the use of "shell systems" (see definition in Section 8), even if RSV considers that they have more drawbacks than advantages. Before a shell system can be introduced certain legislative questions must be resolved.

Interfaces for exchange of information are as far as RSV is concerned largely

guided by current legislation. Elsewhere RSV considers that the exchange of information should be governed by agreements between the parties. In this report RSV clarifies its position with regard to responsibility, design of formats for information transfer etc.

RSV's IT systems contain large quantities of historical data. The systems tied to particular years will not, as far as RSV can see, be converted, whereas information in the systems which is not tied to particular years will be converted on the occasion of a changeover to the euro. The questions concerning historical data have not been finally resolved and will also arise in connection with the continuation of preparatory work in RSV.

Of the four scenarios in the Government's instructions, RSV recommends - from a strictly administrative viewpoint - Alternative D (no transitional period), because for RSV it has considerable advantages and means lower costs. As its second choice RSV recommends Alternative A (transitional period 1 year). For RSV, taking into account the system renewal currently planned, 1 January 2004 would be a suitable date for a changeover to the euro.

Costs and use of resources are difficult to calculate accurately at this stage. These factors are greatly affected by the date and the scenario which are selected. RSV has not found any reason to revise its earlier estimate of approx. SEK 225-250 million as the cost of a changeover of the IT systems to the euro. The calculation assumes selection of Scenario D. In addition there are RSV's indirect costs, such as, for example, demands made on RSV's IT department, forms, training and information.

"Full euro options", i.e. euro service during a transitional period, means substantially higher costs and operational risks to RSV. In Section 13 RSV makes suggestions regarding the extent of full euro options in RSV's sphere of operations.

RSV will continue its preparatory work during the spring of 2000. RSV's Euro Project is working on the drafting of an action plan. A first version is expected to be finished at the end of June 2000. A third report, containing among other things an account of this work (Situation Report 3), will be submitted to the Government on 30 September 2000. To enable RSV then to continue its preparatory work clarification is required, as previously noted, with regard to a number of matters.

1. The instructions

On 19 August 1999 the Government instructed twelve authorities to analyse questions arising in connection with a possible later participation in the third stage of the economic and monetary union (EMU). RSV was one of these authorities.

As required by the government instructions the authorities are to:

Identify and analyse the need for rule changes and propose such changes.

- Identify and analyse problems and questions concerning a changeover of the IT systems.
- Identify questions concerning the interface with other authorities and suggest answers.
- Assess in total what inputs and resources might be needed for a possible introduction of the euro.
- Provide information on the costs of changeover within the terms of the different alternatives (scenarios).

The government instructions also imply certain conditions and assumptions. Some of the most important are:

- An entry into the currency union is assumed to take place at the turn of a year.
- Any transitional period is also assumed to end at the turn of a year.
- It is assumed that the krona will be the only legal tender during a transitional period even if notes and coins may be expected to be in circulation elsewhere in the currency union.
- During the transitional period the public sector will as a rule (exception, see below) deal only with Swedish kronor.
- It is assumed that the public sector will change over from SEK to EUR at the same time at the end of any transitional period (currency changeover date).
- The Tax Administration, the Customs Service and the National Debt Office may be instructed to offer "full euro options", i.e. euro options during a transitional period.
- Certain recommendations and guidelines may be drawn up jointly for the public sector.
- It is assumed that the costs to the authorities of a changeover can be met within the framework of given resources.

A report on the implementation of the instructions is to be delivered to the Government not later than 1 March 2000.

2 Arrangement of the report

In September 1999 RSV reported to the Government on the preparations for the euro which had taken place up to that date (RSV Report 1999:12). That report contains an analysis of the legislation and of the operational systems within the fields of taxation and enforcement, analyses and conclusions regarding certain

questions, and reports on the monitoring of parallel developments and information, and on RSV's continued work on euro matters.

A number of the questions which are contained in the Government instructions of 19 August 1999 have been answered in RSV Report 1999:12. At a number of places in this memorandum there are therefore references to the earlier report, which is also appended.

The arrangement of the current report and its appendices conforms to a common pattern for all twelve authorities. The appendices reflect the viewpoints and recommendations of the RSV Euro Project while the main memorandum sets out RSV's position.

3 Present use of the euro by the Authority and contact with and experience of the authorities of other countries (Appendices 1-2)

As long as Sweden is not a member of the currency union, the main rule is that the RSV Group uses only Swedish kronor. There are a few exceptions to this.

In the financial area RSV already has to be able to handle invoices in foreign currencies. The Board's financial systems (Agresso is being used as from 2000) satisfy these requirements. However government accounting is entirely in Swedish kronor.

The operational systems (tax and enforcement systems) work basically only in Swedish kronor. The REX system, which deals with overdue payments, can also handle foreign currencies. Income statements from other countries contain amounts in the currency of the reporting country, but are used only for compliance purposes without mechanical computations.

In a report submitted to the Government in 1998 (Report 1998-09-28, dnr 4849-98/900) RSV has established that for RSV to be able to deal with reporting of information in euros at all it is necessary to have a firmly fixed exchange rate between SEK and EUR. RSV wishes in this report to underline the importance of this requirement.

As far as contact with and experience of authorities in other countries is concerned, RSV would emphasize that the Board's euro project has proceeded ever since September 1998 in close cooperation with the other Nordic countries, particularly Denmark and Finland, and also with RSV's counterparts in the Netherlands and the UK. Contact with other countries is in RSV's view significant. Experience has, for example, been obtained with regard to the questions of decimals, forms and information. In the continuing preparatory work it is important to maintain and develop the channels of communication and also to follow what is happening in other EU countries.

4 Laws and rules (Appendix 3)

RSV Report 1999:12 contains a comprehensive review of legislation in the field of taxation and enforcement. This will be updated for the first time at the end of

June 2000.

Over and above changes dealt with in the review, there will also be a need for transitional rules. Such rules are dealt with in outline in Report 1999:12.

In RSV's opinion there will also be a necessity for statutory prescription of how translation differences are to be dealt with. These may, for example, be translations between EUR and SEK both during a transitional period and after the end of the transitional period in those cases where IT systems still work in SEK. Certain questions concerning retention of records also need to be resolved. RSV Report 1999:12 shows that a number of different laws and ordinances must be revised. In some cases the revision is of a largely technical nature, whereas in others it is both strategic and structural.

RSV regards it as extremely important to begin such a review of legislation this year. Before legislation is complete no changes at all can be made to RSV's very extensive IT systems. RSV therefore recommends that - even if a decision on membership of the currency union has not yet been taken - legislative work should begin in the Ministry of Finance and the Ministry of Justice. This is necessary in order to ascertain how the rules might be formulated in the event of a future membership of the currency union. RSV assumes that this work will proceed in close collaboration with RSV.

RSV would in this connection point out that it is reported that in Finland joint task forces have been formed containing, for example, representatives of the Ministries of Finance and of Justice. There has been good progress in the resolution of questions of common concern.

5. Decimals, rounding off and standard amounts

Decimals

In its Report 1999:12 RSV has pointed out that it has been unable to find any EC regulation which requires the use of decimals when receiving information as a basis for levying of tax etc. from natural persons and legal entities. From what has emerged from the Euro Project's visit to the Dutch Ministry of Finance in September 1999, the same conclusion has been drawn there. This view is also shared by the representatives of the Authority who have taken part in a task force set up by the coordination group of the Agency for Administrative Development during the autumn of 1999 to study these questions.

In Appendix 4 the Euro Project has made the following recommendations with regard to decimals:

After a conversion from Swedish kronor into euros and vice versa the amounts making up a computation should be shown to at least three places of decimals. The amounts which are then stored should have at least two places of decimals. The converted amounts which are stored/used in an operational system which cannot or will not handle decimals are rounded down to whole numbers.

- The converted amounts and any computed amounts which are included in a financial system should have at least two places of decimals.
- When designing new operational systems room should be left for storing at least two places of decimals.

RSV supports these proposed guidelines concerning decimals.

Calculations and rounding off

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Certain provisions which relate to the introduction of the euro are contained in an EC Regulation (EC no. 1103/97). The regulation contains provisions concerning how monetary amounts are to be translated and reported. This applies both to translation (conversion) of national currencies into euros and translation from euros into national currencies and also to translation from one national currency into another ("triangulation"). The provisions are contained in articles 4 and 5 of the regulation.

It is assumed that *RSV's operational systems* will have SEK as currency during a transitional period. If RSV is to offer "full euro options" this will mean that amounts in euros will have to be converted into SEK before the amount can be included in any of the operational systems. The majority of the operational systems cannot at present receive decimals (cf RSV Report 1999:12). It is not possible to rebuild the systems for a short transitional period. The converted amount must therefore somehow be changed into a whole number. The Euro Project considers that as long as the operational systems have not been reconstructed truncation is the preferred choice of solution where amounts contain decimals (Appendix 4).

Converted amounts which are included in a *financial system* ought when applying the rounding-off rules in the regulation to be rounded off to at least two decimal places.

As the Euro Project has argued in various contexts, the RSV considers that amounts received in a operational system that is working in SEK and cannot deal with decimals must be stated as whole units. However RSV has no specific opinion on which method ought to be used. RSV assumes that amounts in the legislation will be stated in euros as from the currency changeover date. The aim ought to be to have the amounts determined in whole euros far as possible.

In Appendix 4 the Euro Project has proposed the following recommendations with regard to rounding off:

In computations the rounding off should occur as late as possible.
When converting to whole numbers the corresponding EC rules for rounding down to the nearest unit below should apply.

RSV has no objection to the proposed recommendations.

Standard amounts etc

The state deals with a large number of standard amounts which are well known both to those who work in the authorities concerned and to those receiving/returning information. They concern both levels of benefit of various kinds and standard amounts. That these amounts are round figures and easy to remember makes things easier for all parties. Examples of such amounts in the tax and enforcement field may be standard deductions when calculating income tax, limits to deductions for travel between home and work and basic sums when noting payments as overdue.

The Euro Project has proposed the following recommendations with regard to standard amounts:

- During a transitional period these amounts will be handled like any others that have to be converted.
- After the end of a transitional period standard amounts and threshold values ought to be in even hundreds, or tens of euros.
- In exceptional cases small amounts may also need to be expressed stating cents, but then tens of cents.

RSV shares the views of the Euro Project on these matters.

6 **Operational matters (Appendix 5)**

Section 8 of RSV Report 1999:12 describes the pattern of RSV's continued euro preparations. It states among other things that an action plan is to be drawn up. This work has begun. A first version is expected to be ready at the mid-point of 2000.

The IT questions are dealt with in Section 7.

An introduction of the euro will affect not only the RSV Group's IT operations, but every sphere of activity, for example those concerning:

- forms
- brochures
- terminal procedures and display layouts
- training material and information

RSV considers it important in this context to make the following point. The steadily increasing internationalization is reinforced by the establishment of a common currency. This means that compliance and enforcement activities will change, partly because of the development of the Internet and the increasingly rapid movement of capital. A new method of work will make new and different demands on the skills of RSV Group staff.

7 IT operations (Appendix 6)

A review of RSV's IT systems was contained in RSV Report 1999:12. This does not include a review of the systems of the Enforcement Service. The reason is primarily that a new IT system (INIT) is being developed and is to replace the present REX system.

Other IT systems on the enforcement side are also to be reviewed to identify any changes which may affect the introduction of the euro. The systems which are not replaced by INIT (e.g. DUFFEX and SUPRO) will be looked at. An account of this will be given in the next RSV Situation Report.

In the next Situation Report in September 2000 RSV will also describe the work on an action plan for a possible changeover to the euro. This plan will build on the strategic plans for system renewal that are drawn up in another context. This work forms a part of the review of IT systems. The question of which systems have to be rebuilt before any changeover to the euro is of fundamental importance to RSV.

8 Shell systems (Appendix 7)

According to the analytical model of the Agency for Administrative Development for adaptation of IT systems to the euro (Report 1998:10), "shell" means a translation function which handles all translation from EUR to SEK and vice versa.

Shells may occur in several places, both between user interface (VDU/reporter) and applications program and between applications program and database. In addition internal shells - bridges - occur between systems within an authority which communicate with each other and which allow systems which operate with different currencies to communicate with each other.

Like the Euro Project, RSV takes the view that a single shell is not enough to meet the needs of the RSV Group. It is more likely that each system may require its own shell, due to the fact that threshold values, decimals etc. may differ between the different systems.

An introduction of shell systems is in RSV's opinion accompanied by risks of various kinds. Shell systems may also be technically extensive. Introducing and dismantling them therefore requires much planning and management in an organization with a complex system structure. Moreover it takes a lot of time and extensive resources/costs to introduce a shell.

Before RSV can decide on the appropriateness of introducing shell systems the legislative questions concerning filing, translation differences etc. must be resolved.

In Appendix 7 the Euro Project gives some examples of the advantages and disadvantages of shell systems:

Advantages:

- Reduces the changes needed in existing system solutions in the short term.
- Less disruption of administration of existing systems.
- Simple solution for information flows to data storage.

Disadvantages:

- Temporary solution not a good solution in the long term.
- Risk that problems and costs build up for the future.
- Requires extensive logging in order to retain traceability.
- Rounding-off differences may need to be stored for reconciliation.
- Difficult to use when computations in existing systems are made in several stages with rounding off; sometimes against set threshold values.
- In certain cases "interventions" in the operational system may be considerable despite the shell (e.g. special requirements of user dialogue/processor dialogue).

The inter-authority task force (set up by the Agency for Administrative Development coordination group with a chairman from the RSV Euro Project) has listed what is required of a shell system. The requirements may change with new legislative and technical demands. Here are a few examples:

What is required of a shell system:

- Use of shell systems requires legislative regulation, for example concerning tolerance levels with regard to rounding/reconciliation.
- Shell systems must function both during and after a transitional period.

Shell systems must give a possibility of successive changeovers (interfaces between our own systems and between our systems and those of others).

- Conversion must take place within the shell. The actual conversion must be carried out in a manner common to all authorities (common conversion algorithm).
- The EUR transactions must be loggable if the requirement for traceability is to be satisfied.

- For auditing purposes it must be possible to store information to the effect that conversion has taken place.
- The majority of VDU pictures ought to be switchable between SEK and EUR during a transitional period.
- Rules and procedures for the handling of rounding-off problems must be developed. They should be standard for all authorities.

RSV agrees with these requirements and at the same time emphasizes that the requirements made of a shell system must be such that reliable working of operational systems is not threatened.

9 Interfaces (Appendix 8)

When choosing a strategy for adaptation of IT systems to the euro it is in RSV's opinion important to consider the interfaces between the IT systems. By interface is meant a contact point between IT systems.

The first stage in this work, in RSV's opinion, is the listing and clarifying of all the connections in internal and external IT systems. RSV Report 1999:12 shows the result of a survey undertaken by the Euro Project of the external interfaces between the operational systems of the RSV Group and (1) the systems of other authorities (Appendix 4 A) and (2) those of external interested parties with which RSV exchanges information (Appendix 4 B). Appendix 5 of the report lists the interfaces which exist between the financial systems of the RSV Group (Agresso) and RSV operational systems, external payments agencies and central public accounting.

RSV has taken part in an inter-authority task force on interfaces set up by the coordination group of the Agency for Administrative Development. RSV's survey has as a result of the work of the force been supplemented in various respects. New tables have been prepared. These are appended in sub-appendix 4.

An adaptation of external interfaces may be achieved with varying degrees of eurocompatibility. The Euro Project recommends that the alternative which is called the *basic rule* in the normal case is the one which ought to be applied. For external data exchange the basic rule means that no changes are initially made to the existing interfaces. Recipients and senders agree on the date when amounts are to be stated in the new currency. Sender and recipient must know what applies at any given time. Responsibilities should be regulated by *agreements* for each external interface.

RSV supports the alternative recommended by the Euro Project as the normal procedure. This alternative will probably become the most usual procedure in adapting interfaces where exchanges of information take place at longer intervals (monthly, quarterly etc.). For more frequent exchange of information concerning amounts there may transitionally be reason to supplement interfaces so that amounts can be stated in the currency of choice. This applies particularly to

interfaces with payments agencies.

RSV would in particular point out that a large part of the information which is dealt with in RSV's IT systems is obtained by law from a large number of returners of information. The contents of the information are determined by the contents of the legal provisions. The format is determined by RSV and must - and RSV would particularly emphasize this - be made general. It can therefore only be adjusted to the needs of the individual party returning information in exceptional circumstances.

Finally RSV would stress that questions concerning the adaptation of external interfaces must be included in RSV's continued review of IT systems. How this adaptation is to proceed in different systems must be decided in the individual case. The most important thing, in the opinion of RSV, is for there to be a clear and definite *agreement* between affected parties concerning what applies.

10 Historical data

By historical data is meant:

- information concerning amounts which is stored in SEK in IT systems at the beginning of any transitional period, and
- information concerning amounts which is subsequently received and stored in SEK up to the date when the authority goes over to receiving and storing information on amounts in EUR.

RSV handles a large quantity of information in big IT-based registers. There is a sizable exchange of information with, for example, other authorities, banks, companies and the public. RSV also produces and stores information for statistical and compliance purposes.

The information is largely tied to particular years. This applies, for example, to income and wealth information for annual assessment. The information refers to a particular income year. As assessment and charging decisions may be reviewed or appealed against for at least five years, and an even longer time may pass before a decision has been taken in court, the information must be stored in the registers for a long time.

Certain operational systems, e.g. the tax account and the enforcement systems, contain information which is not tied to particular years even if the systems contain information for several years back. In these systems it is the position today that is most interesting.

An inter-authority task force to deal with questions relating to historical data has proposed a number of recommendations, which the Euro Project has supported (Appendix 9).

RSV supports the Euro Project's working hypothesis for historical data as described below, which as far as the parts relevant to RSV are concerned is based

on the proposed recommendations referred to above. The working hypothesis implies that:

Systems **tied to particular years** (e.g. assessment systems) are not converted at all. Individual particulars in such a system are converted as required.

As far as systems **not tied to particular years** are concerned, such as, for example, the tax account system or the enforcement systems, all the information in the database is converted. Only one currency is therefore used in the systems. At the end of any transitional period all the amounts in the systems are converted using the fixed translation factor.

Those systems which deal with review will also continue to work with SEK as far as the time before the currency changeover date is concerned. Decisions are also taken in SEK in such cases. Amounts to be recovered are translated and recorded in EUR. Interest computations are also made in EUR. However the possibility that different solutions may be used for different systems cannot be excluded.

But the Euro Project is also examining a solution whereby all the amounts which are attributable to the period before the currency changeover date will remain in SEK and be converted into EUR only as necessary for each individual item of business. Interest computation takes place in SEK until the currency changeover date and for the following period in EUR.

Both alternatives give the same result provided that the fixed translation factor is used. The continued fact-finding work may show which alternative is to be preferred from the point of view of resources and cost.

The currency changeover date, when any transition period has ended and the EUR has been introduced as tender in Sweden, is set at a time which allows certain major planned system changes to be completed and commissioned without external shell systems needing to be developed.

In practice this means that a changeover to EUR - from RSV's viewpoint - cannot take place before the start of 2004, when a new assessment system for income years from 2004 onwards is due to be introduced. Converting the existing assessment system into EUR in order then immediately to start on the development of a new system is not considered practically or financially realistic.

During any transitional period all data processing will take place in SEK, which means that shell systems are required in order to meet the demand for "full euro options".

RSV's selection system, which uses both "new" and "old" information for comparison, can be dealt with separately. There must be coordination between RSV and companies with regard to the exchange of information. Interfaces must also be coordinated.

11 Estimate of resource inputs and costs (Appendix 10)

The instructions require information with regard to costs for a total of four scenarios, namely

А.	Qualified preparation time: 12-15 months; transitional period: 1 year
В.	Qualified preparation time: 12-15 months; transitional period: 2 years
C.	Qualified preparation time: 3-5 months; transitional period: 2 years
D.	Qualified preparation time: 24-27 months; transitional period: 0 years ("Big Bang").

The conditions and assumptions announced by the Government provide that the public sector will go over to the EUR only at the end of the transitional period and until then will handle only SEK in its systems. Only those authorities which are to offer "full euro options" will be affected in that they are expected to be able to accept accounts and payments in EUR from the first day of the transitional period. Such a level of service to companies presupposes that the operational systems of the authorities concerned are either rebuilt before the transitional period to be able to handle double currencies or are provided with shell systems (EUR/SEK and SEK/EUR). In the government decision the tax authorities, the Customs Service and - to some extent - the National Debt Office have been specified as "full euro option" authorities. The great majority of authorities, however, are not affected by any transitional period or by "full euro options".

In these circumstances the Euro Project has stated as follows:

"Concerning the need for necessary time for handling EUR in the systems the Swedish Bankers' Association has estimated the banks' need for preparation time as at least 18 months. In its previous report of 28 September 1998 RSV has estimated that it will take at least 15 months - possibly longer - to develop, test and introduce necessary shell systems in the taxation business provided that adequate resources and skills are made available and necessary legislative regulation is decided. It is therefore reasonable to expect advance notice of at least 18 months before a shell system is commissioned. This circumstance means - if a shell solution is to be chosen - that Scenario C (qualified preparatory time 3-5 months, transitional period 2 years) is not practically possible for RSV, whereas the implementation of other scenarios is, strictly speaking, possible."

RSV shares the opinion of the Euro Project. From a strictly RSV viewpoint, Scenario D is to be preferred. No transitional period will then be involved, nor will any arrangements on the part of RSV and a few other authorities for offering "full euro options" be necessary. Scenario D requires, in RSV's opinion

- that the total time for preparation be long enough (24-27 months according to the conditions in the instructions),
- that necessary legislation is passed close to the commencement of the qualified preparatory time, and
- that "fixed" translation factors are available well before the currency changeover date.

RSV would also refer to the detailed analyses of Scenarios A, B and D which the Euro Project has presented in Appendix 10. RSV wishes in particular to emphasize the following positive effects of Scenario D compared with the scenarios which contain a transitional period:

- Only one currency in, which reduces the need for external shells (but not the need for internal shells). RSV thus avoids having to develop and introduce shell systems for two currencies during a transitional period only to dismantle one currency shell as soon as it ends.
- Fewer short-term solutions. A short-term shell solution does not contribute to the goal of achieving complete EUR functionality and is therefore costly from this aspect.
- The need for changes in and extension of the operational systems is reduced, partly because the need to state the type of currency in the operational systems is reduced.
- Problems of confusion of currencies and dealing with boxes which may lack information regarding type of currency are fewer.
- The procedure gives a maximum changeover time, because handling of information in EUR does not take place until after the currency changeover date. There will therefore be time to adjust more applications to the new currency, which itself reduces the need for shell solutions. However shells will be needed for all alternatives.
- The whole public sector changes currency at the same time.
- Notes and coins in EUR will be introduced as tender at the time of the changeover.
- Information and training programmes both external and internal can be coordinated and concentrated.

RSV is naturally aware that there are problems and risks associated with Scenario D. RSV refers here to the Euro Project's account in Appendix 10. However these risks should not in RSV's view outweigh the considerable advantages.

RSV wishes here also to mention the Government draft bill 1999/2000:23. The bill was adopted by parliament on 9 February 2000. The bill proposes that it should be possible for limited companies and others to keep their accounts in EUR as from the financial year beginning in 2001. The question of whether accounting in sterling, dollars, yen and Norwegian and Danish kronor should be allowed will also be considered. Accounts and payments to the tax authorities must still take place in SEK, however, according to the bill. RSV believes that this solution is reasonable in meeting the needs and wishes of both industry and the tax authorities.

If Scenario D is not to be implemented, RSV shares the view of the Euro Project that as second choice a solution should be sought with as short a transitional period as possible. This reduces processing problems and the cost of double currencies for "full euro option" authorities. For this reason, Scenario A is preferred to Scenario B.

Scenario C is considered, as reported earlier, to be impracticable, because the qualified preparation time, 3-5 months, is not enough to allow the necessary shell solutions to be developed.

12 Resources required for and costs of an introduction of the euro

The resources and, therefore, the costs needed for the preparation and implementation of an introduction of EUR in public administration in Sweden varies greatly between different authorities depending on the number of operational systems involved and their complexity. The costs also depend on the point in time when a changeover to EUR takes place. If the changeover to the euro takes place at such a time that the authority can adjust its operational systems to the new currency at a time of system renovation or renewal, then the resources required and thus the costs of an adaptation to the EUR will of course be lower than they would otherwise have been.

It is in RSV's view extremely difficult without clear definition of the conditions and exhaustive study to make any general assessment of the need for resources for introduction of the new currency in the RSV Group and to calculate the cost of this.

In an examination of the problems which RSV carried out in 1996/97, it was considered that RSV's IT section, which is responsible for the technical development and administration of the RSV Group's IT systems, would need at least 200 man-years for a changeover to the euro.

The transition to EUR has sometimes been compared with work on the millennium bug. To some extent it is of course a similar task that has to be carried out. However it has also been estimated that EUR adjustment entails costs 3-5 times those for the millennium bug work, partly because all the amounts in the systems acquire new values and also because of the connections which exist between different information concerning amounts within and outside the systems. Such a method of calculating costs gives, as far as RSV and the Euro

Project have been able to ascertain, reasonable results. Appendix 10 contains a specimen calculation of the Euro Project which shows that the earlier RSV estimate of SEK 225-250 million for the introduction of the euro would in that case be quite accurate.

For comparison the Euro Project has mentioned that the Danish Told & Skat has estimated the cost of converting all its IT systems at just below the equivalent of SEK 200 million.

What is not covered at all by RSV's cost estimate is the costs for demands on the IT section, forms, training and information; both internal and external. The scope of such inputs is in RSV's opinion largely dependent on the selected scenario and the extent to which information can be supplied in a similar form for the whole public sector. If the RSV Group is to offer "full euro options" the tax and enforcement authorities must inform the companies of what "full euro options" implies and plan and implement the training of their own staff at an early date.

In the context of the considerations that have been discussed here and in Appendix 10, RSV has reached the following general conclusions.

It would appear to be beyond any doubt that a solution on the lines of Scenario A or B, with a transitional period and "full euro options", will entail substantially higher costs than a solution on the lines of Scenario D, primarily because more shell solutions have to be developed for use for a relatively short period, and because such a solution requires more extensive training and information.

At the present time, however - as explained - there is in RSV's opinion insufficient information for a more detailed calculation of the cost implications of the various scenarios.

RSV assumes that later in the spring of 2000, when better information is available, the Board's Euro Project will return to the board management with a more detailed cost calculation. The Euro Project will then have access to material for a system renewal plan for the RSV Group. It will then be possible to plan the project on the assumption that implementation will take place at a date which is appropriate from the point of view of the RSV Group against the background of a planned renovation and renewal of the Group's IT systems. Such a date is - as far can at present be determined - the start of 2004, when it is planned that considerable parts of a new assessment system will be commissioned.

13 Early euro service, "full euro options" (Appendix 11)

The Government's instructions specify that RSV should analyse and report on the implications if companies are given the possibility from the time of entry into the currency union of using euros in tax returns and other reporting of taxes and charges, known as "full euro options". This implies that during the transitional period which may possibly be decided on and which may be assumed to cover a period of one or possibly two years, the Tax Administration must be able to handle accounts in both currencies at the same time. As a precondition, however, there would be a fixed rate of exchange between the krona and the euro.

It can also be assumed that tax legislation during the transitional periods is in Swedish kronor. Similarly the IT systems will work only in Swedish kronor. Euro amounts will therefore have to be converted into kronor via one or more shell systems before processing and storage in the tax register.

What is included in the concept of "full euro options" and which companies are to be covered is not defined in the Government instructions.

An introduction of an option of supplying information for taxation purposes in more than one currency entails, as far as the Tax Authority is concerned, considerably increased costs. Such an arrangement also involves risks. For example, adjustment of IT systems which are of relevance only during a transitional period of one or at most two years is necessary. These are factors that have to be included in the picture when the decision is taken on who are to be covered and what is to be meant by "full euro options" with regard to the Tax Administration's field of activity.

An adaptation based on "full euro options" will require, in addition to the introduction of shell systems, adaptation of:

- forms
- laser printouts
- data input and output procedures
- systems for processing returns
- processing procedures
- compliance and selection systems
- statistical and monitoring systems
- terminal displays
- brochures
- other external information
- training material

In Appendix 11 RSV's Euro Project has made proposals with regard to:

- which companies should be included,
- which reports/payments should be covered,
- when "full euro options" should come into effect.

RSV concurs with the deliberations of the Euro Project. RSV considers in these circumstances that only the following types of company should be included in the group covered by "full euro options":

- Limited companies, co-operative economic associations, insurance companies, finance companies; i.e. the group of companies which it is are recommended should be allowed to report in euros in Government draft bill 1999/2000:23.

Furthermore RSV considers, like the Euro Project, that only the following accounts/payments which are attributable to the transitional period should be included:

- Incoming and outgoing payments of taxes and charges (via payments agencies).
- Income tax returns (inc. SRU [standardized accounting statement] forms).
- The comprehensive tax return (VAT, employer's charges, special salary tax, PAYE).
- Quarterly accounting for VAT.
- Excise duty returns.

For the reasons set out by the Euro Project in Appendix 11 RSV would strongly emphasize that income statements cannot be included in "full euro options" but must be made out in SEK for the whole transitional period.