

Riksbankens e-krona

14 March 17 Project plan

Phase 1

mars 2017

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1. Introduction

This action plan has been developed because the Riksbank wishes to investigate, in one project and without preconceptions, the possibility of issuing an electronic means of payment, e-kronor, as a complement to cash. However, the Riksbank has not taken any decision on issuing e-kronor.

Among other factors, the background to the Riksbank's interest in investigating this question is formed by the steady decrease in cash use over a longer period, at the same time as the Riksbank has the statutory task of supplying the country with banknotes and coins. The private sector is reducing utility and access to banknotes and coins for the general public and may, ultimately, determine access to central bank money and payment methods. How would a situation in which cash is no longer used to any greater extent affect the Riksbank, the financial sector and society? These and many other questions should be answered before the Riksbank can make a decision about issuing or not issuing e-kronor.

The foremost reason for the reduced level of cash usage is assumed to be technological developments in society that have increasingly made possible the use of electronic payments for the general public, organisations and companies. This development has been underway for several years and new methods and technologies are developing at an increasing rate, as is demand for rapid and simple electronic payment methods. There is thus reason to investigate whether the Riksbank can use new methods and technologies to provide a means of payment that is guaranteed by the Riksbank in the same way as banknotes and coins and, if so, which form this would take. Several legal questions must also be carefully analysed.

The starting point for this project is the Riksbank's task of maintaining price stability and promoting a safe and efficient payment system in a new digital environment.

The e-krona is not intended to replace cash, but should be seen as a complement to cash.

The project shall discuss and analyse relevant issues, producing background material to give the Executive Board a sufficiently strong foundation to take a stance on whether the Riksbank should issue an electronic means of payment.

Issues surrounding electronic means of payment are currently being discussed internationally among central banks, technology companies and financial markets. Consequently, the project will monitor international developments and will also actively seek the cooperation of appropriate national and international parties, such as the Nordic central banks.

This project plan presents the overall aims and objectives of the project, proposals for the project organisation and overall timetables and costs for the project, together with an account of subprojects included and a communication plan.

It is proposed that the project be divided into three phases as described below (see Figure 1). This division of the project has been proposed because decisions on the project's direction and budget need to be taken step by step. At present, it is impossible to obtain a complete overview of all sub-issues that need to be analysed.

The project will probably need to work for several years to come. Among other reasons, this is because technological developments within the area of payments are extensive, making it difficult to gain an overview of the alternatives and possibilities existing for the e-krona just

a few years ahead. Our assessment is thus that it would be appropriate to regularly renew our stance on the scope and direction of the project. Our proposal is every year, in conjunction with ordinary operational planning and budget review.

The aim of the project

The aim of the project is to analyse the Riksbank's possibilities for issuing an electronic means of payment, to develop proposals for the qualities this means of payment, the e-krona, should possess, and to address the issue of the advantages and disadvantages of a decision by the Riksbank to issue or not to issue an electronic means of payment.

The objective of the project

The project's objective is to produce one or several proposals for an e-krona issued by the Riksbank so that the Executive Board can take a decision to continue to investigate the conditions for it in phase 2 or to choose not to investigate any further.

2. Project work

The issues to be analysed within the project include the characteristics of various payment methods, systems issues, consequences for the payment system, financial stability and market influence, consequences for monetary policy and the framework for its implementation, technical issues, legal aspects, communication and risks. In addition, effects on the Riksbank's balance sheet and seigniorage and possibly other activities must be investigated.

An overall proposal for how the e-krona, issued by the Riksbank, could be designed must be produced. This makes up phase 1 of the project (see Figure 2). Following this, the Executive Board will decide whether the Riksbank should continue the project in a second phase, phase 2 (see Figure 3).

In phase 2, more concrete operational capacities, technologies and test environments will be developed for the proposed e-krona. In this step, proposals for a governance and management model for the 'e-krona system' will be developed, and other legal issues, such as regulations and agreements, will be formulated and prepared. The action plan for phase 2 will be developed in autumn 2017 in conjunction with ordinary operational planning and budget review.

The Executive Board will not decide whether the Riksbank will issue e-kronor until after phase 2.

If the Executive Board decides that the Riksbank is to issue e-kronor, phase 3 of the project will be initiated (see Figure 4). Phase 3 is the development and implementation phase. In this phase, issues of governance and ownership, technologies and the legal structure of the e-krona will be worked out in more detail and decided upon.

A communication plan has been developed for the project, an overall version of which can be found in appendix 2.

This project plan primarily describes phase 1 of the project.

Figure 1. The various phases of the project

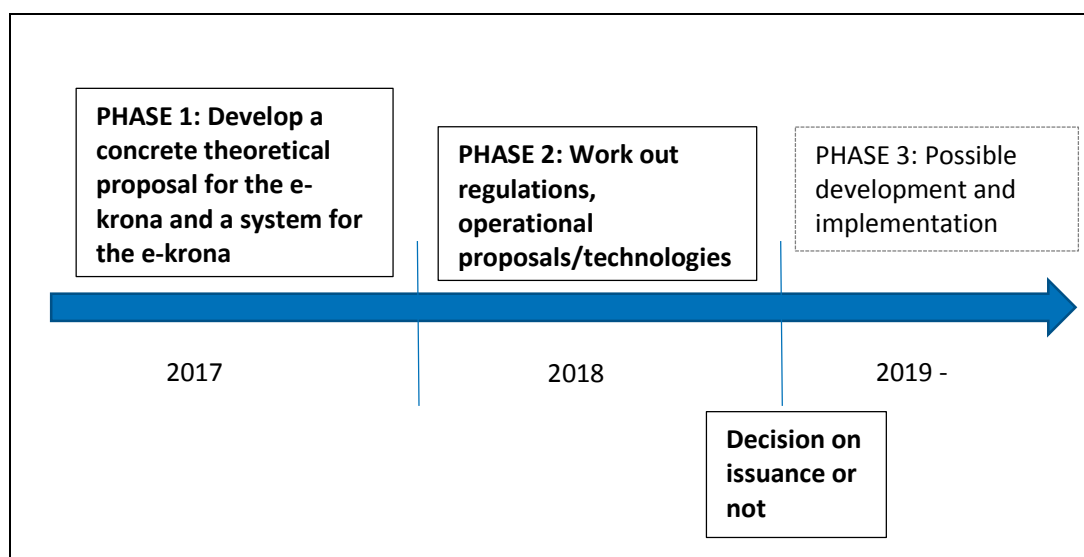
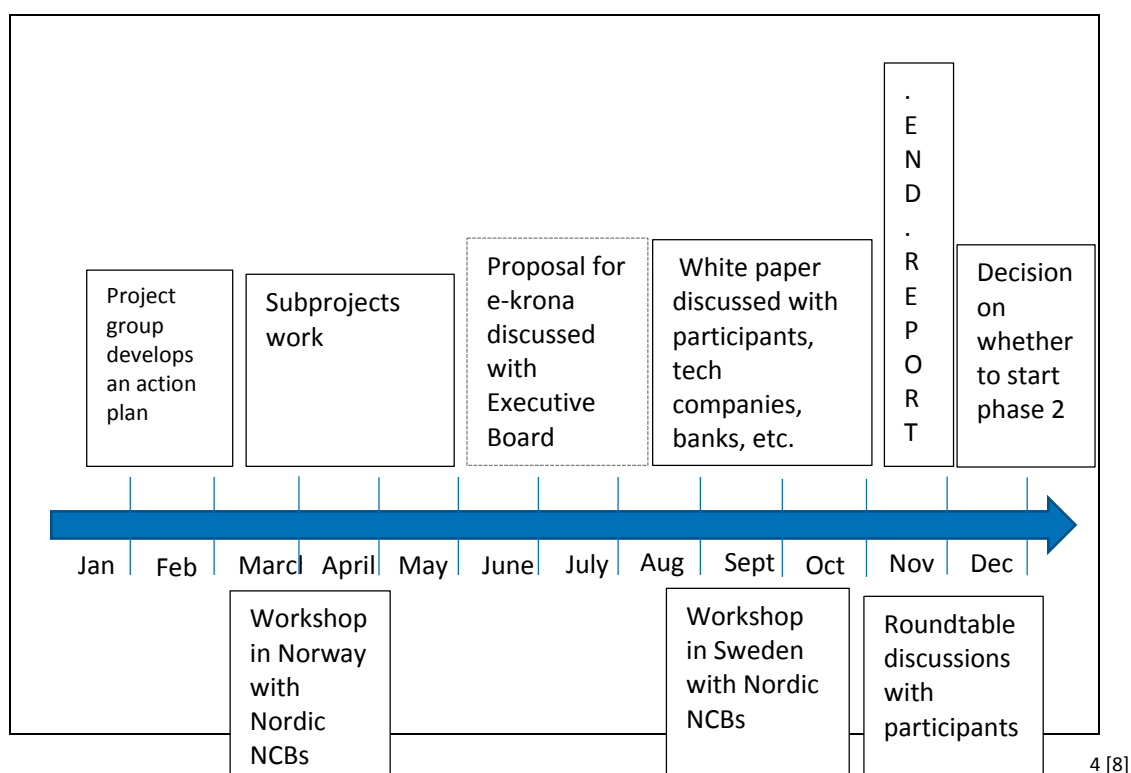


Figure 2. Phase 1, 2017



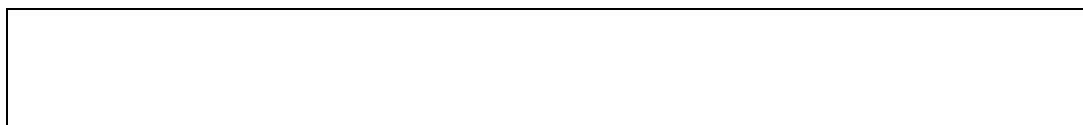


Figure 3. Phase 2, 2018

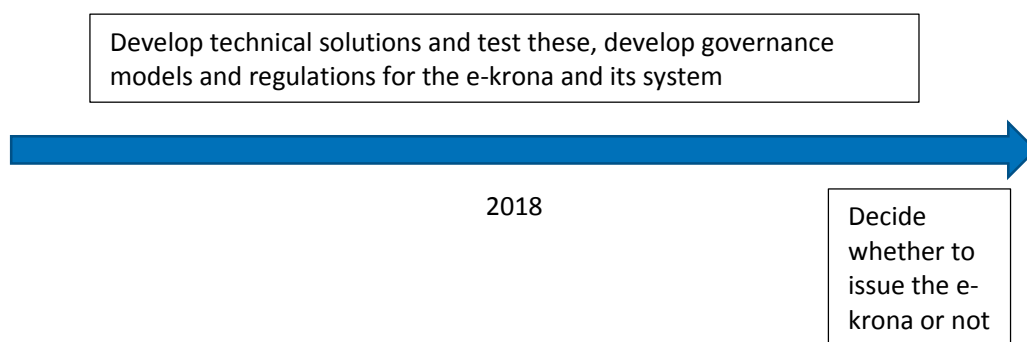
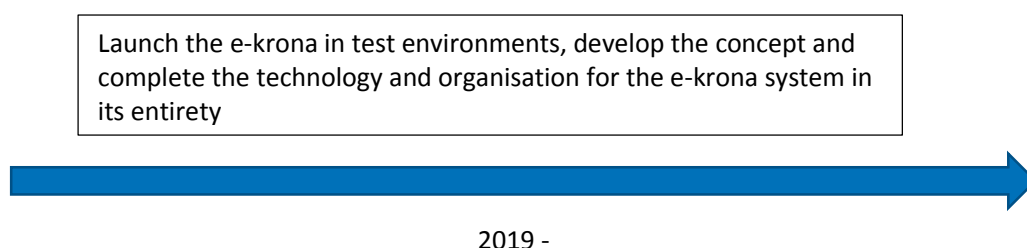


Figure 4. Potential Phase 3, 2019 -



2.1 Subprojects in phase 1, 2017

The issues the project proposes be investigated in 2017, in phase 1, are described in more detail in appendix 1. There follows a list of subprojects to all be conducted within the framework of the boundaries presented in 2.2.

- User perspective
- Mapping characteristics of payment methods
- Model of e-krona
- Consequences for the payment system and financial stability
- Consequences for monetary policy and the framework for its implementation
- Scenario analysis for e-krona
- Technology for e-krona
- Legal aspects

2.2 Boundaries of the project

- This action plan primarily describes phase 1 of the project (see Figure 2).

- In phase 1 of the project, the analysis focuses on the short and medium terms. The long-term effects of the e-krona and its design are discussed more generally.
- In phase 2, once further limits for the characteristics of the e-krona have been set, the longer-term effects can be analysed in more depth.
- The e-krona must be suitable for smaller payments. It will not be developed primarily for large payments, which are handled by RIX, or for payments between companies.
- The e-krona shall not replace cash or other payment solutions, but shall form a complement.
- As a starting point, the e-krona is not intended to create a new monetary policy instrument or to have primarily monetary policy purposes. However, the implications for monetary policy and the framework for its implementation shall be analysed. This can be reassessed later.
- The proposed solutions recommended for the e-krona must be flexible so that the krona can be adjusted and linked to new technology developed over time. It must also be possible to amend its functions and characteristics over time.

2.3 Risk management in the project

The main project is responsible for the overall, collective risk outlook for the project.

Risk management is an important part of all of the subprojects and phases of the project. In phase 1 of the project, we primarily see risks such as shortages of skills and resources.

The main project will conduct a project risk analysis over the spring and also draw up a list of risks for the general and overall risks. Risks that it may be relevant to monitor include risks of poor governance, cost increases and delays. Another overall risk is that of damaged confidence in the Riksbank, perhaps due to a substandard solution or failure to meet the general public's expectations. This type of risk is considered in phases 2 and 3 of the project.

The leaders of the subprojects are responsible for appropriate risk management within their subprojects and for analysing and assessing risks in the proposed measures. Risk assessment, traceability and vulnerability and security issues are highly important overall, both in the project and in the analysis of the various issues.

2.4 Overall resource requirements for the project

Overall costs and resource requirements for the project are listed below. The greater part of costs and resource requirements are specified in the appendix, which describes the subprojects in more detail. On the other hand, the General Secretariat will bear some of the cross-project costs, for example for meetings with counterparties and technological companies and a Nordic central bank workshop, which are only specified in the table below.

Budget year	FTE 2017	SEK 2017	2018	2019
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FTE	About 7 full-time equivalents ¹		Produced Nov–Dec 2017	Produced if relevant
Consultancy support		About 2 consultants within the Technology subproject SEK 2–4 million	See above	See above
Other costs (travel, conferences, seminars etc.)		About 230,000		
Total	7 FTE	SEK 230,000 + consultants for technology SEK 2–4 million	See above	See above

2.5 Project organisation

The project organisation consists of a steering group, a project leader, a project group and reference groups. Participants in each group, their role and governance are described below.

Steering group

Chair: Cecilia Skingsley

Steering group participants: Christina Wejshammar ABK, Kasper Roszbach AFS, Marianne Olsson AVS

AFM and APP co-opted until further notice.

Project manager: Eva Julin STA

Project coordination: Frida Erlandsson STA

The steering group's role is to:

- The chair takes decisions in the project.
- Decide on the prioritisation of the project's resources.
- Follow up the project's results and, if necessary, decide on reprioritisation.
- Follow up the project's risks and, if necessary, decide on measures.
- Take ultimate responsibility to the Executive Board for the project.

Project manager

The project manager's role is to:

- Push the project forward.
- Compile background data for the steering group.
- Propose prioritisation of the project's resources to the steering group.

¹ Divided among the Riksbank's departments: STA: 1.9 FTE, AFS: 1.75 FTE, APP: 0.2 FTE, ABK: 1 FTE, AVS: 2 FTE, AFM: 0.2 FTE

- Follow up and provide information for the steering group on the project's results and, when necessary, propose reprioritisation.
- Follow up and provide information for the steering group on the project's risks and, when necessary, propose measures.
- Inform the Executive Board (and, when necessary, the General Council) on the project's development after checking with the steering group.

Project group

The project group consists of project leader Eva Julin STA, with Björn Segendorff AFS, Ann Landelius AVS, Anna Wilbe AFS, Mats Wallinder ABK, Paola Boel APP, Ian Vitek STA, Gina Bayoumi STA, Pär Karlsson ABK, Jan Möller ABK and Frida Erlandsson STA, David Westin APP and Per Åsberg-Sommar AFM.

The participants in the project group are appointed by the departments and may change over time.

The project group's role is to:

- Push forward the included subprojects under the responsibility of the subproject leaders and make status reports to the project leader.
- Conduct mutual reconciliation so that all subprojects are well coordinated.
- Follow up and provide information for the project leader on the project's risks and, when necessary, propose measures.
- Inform the steering group and Executive Board on each subproject's progress when the project leader has not done so.

Reference groups

The Riksbank's steering group and payments committee are the reference groups for the project.

Project management

The project group holds regular meetings to check the status of the various subprojects and inform each other of current activities, external contacts, resource use, delivery capacity and target fulfilment.

The project leader holds regular bilateral meetings with the subproject leaders for status updates.

The steering group and the reference groups meet when necessary.

The Executive Board decides on action plans and budget for the project. The Executive Board is regularly informed of the project's work.