Extract from the report to the Public Accounts Committee on the Danish Defence's EH-101 helicopters



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revision

I. Introduction and Results

1. This report is about the Danish Defence's procurement and implementation of 14 EH-101 helicopters at a cost of approximately DKK 3 billion. The decision to acquire the EH-101 helicopters was part of the Danish Defence Agreement 2000-2005 of 25 May 1999.

The EH-101 helicopters will replace the Defence's S-61 rescue helicopters and make it possible for the Defence to perform transport tasks.

2. Rigsrevisionen has conducted the examination of the Defence's procurement of the EH-101 helicopters, because of the significant problems relating to the procurement, implementation, and level of operational availability which have been reported since the Defence signed the contract with the supplier.

The supplier delivered the last EH-101 helicopter early in 2007 which was about one year later than originally planned. In mid 2007, the Defence transferred six EH-101 helicopters to the United Kingdom at the request of the British Defence. The British Defence will transfer six new EH-101 helicopters to the Danish Defence in late 2009. This means that the transport task, including troop transport, cannot be performed in full in 2010.

3. Rigsrevisionen prepared a memorandum on the Defence's procurement and implementation of the 14 EH-101 helicopters for the Danish Public Accounts Committee meeting on 21 May 2008. At the meeting, the Public Accounts Committee asked Rigsrevisionen to conduct a major examination on the basis of the memorandum.

4. The objective of the examination is to evaluate whether the Defence has handled the procurement and implementation of the EH-101 helicopters in a satisfactory manner, and whether the Ministry of Defence has kept the Folketing (Danish Parliament) informed of the procurement and implementation of the EH-101 helicopters. The report addresses the following four questions.

- Were the Defence's preparations leading to the selection of the EH-101 helicopter satisfactory?
- Has the Defence handled the contracting with the supplier in a satisfactory manner?
- Has the Defence been able to perform the planned tasks using the EH-101 helicopters?
- Has the Ministry of Defence kept the Folketing informed of the procurement and implementation of the EH-101 helicopters?

5. The examination concerns the period stretching from the end of the 1990s to August 2008. The data in the report have been collected in the period March – August 2008.

RESULTS OF THE EXAMINATION

The objective of the Defence's procurement of the 14 EH-101 helicopters was to acquire a helicopter which could perform both the search and rescue task, and the transport task, including troop transport.

It is Rigsrevisionen's overall assessment that the objective of the Defence's procurement and implementation of the EH-101 helicopters, i.e. to be able to perform search and rescue tasks using this helicopter alone, has not been fully achieved so far. On account of the transfer of six EH-101 helicopters to the British Defence, it will not be possible to perform the transport task in full as planned in 2010. At the end of 2009, at the latest, the Defence will again have 14 EH-101 helicopters at its disposal. However, the Defence will only be able to perform both the search and rescue tasks and the transport task if the Defence can manage to keep the EH-101 helicopters at a higher level of operational availability than attained so far. Moreover, it is Rigsrevisionen's overall assessment that the Ministry of Defence has kept the Folketing informed of the procurement and implementation of the EH-101 helicopters on a regular basis.

The Ministry of Defence is currently working on various models for the future performance of tasks and is engaged in reaching a solution with the supplier concerning the established problems. Rigsrevisionen expects the Ministry of Defence to inform the funding authorities if the tasks to be performed change significantly compared to the tasks described in Appropriation 17 10/10 2001.

This overall assessment is based on the following:

The Defence's preparations leading to the selection of the EH-101 helicopter were not entirely satisfactory. Overall, the selection process was in compliance with the Defence's procedure for procurement of equipment then in force, but it was characterized by lack of relevant documentation and description of the items for decision, and the risk assessment was inadequate.

- The Defence defined a clear objective of the procurement based on analyses of the requirements to perform the search and rescue task and the transport task, and the requirement to standardise the Defence's fleet of helicopters.
- The Defence defined relevant military requirements to the procurement of the EH-101 helicopters based on the tasks which they were to perform.
- The Ministry of Defence has not been able to account for the background for the expectation that the helicopters would be operational 80 percent of the time and consequently the decision regarding the quantity of EH-101 helicopters which it would be necessary to procure was made on an uncertain basis.
- The Defence set up relevant criteria for a comparison of the standard helicopter candidates. The selection criteria were weighed against each other, but the principles of weighing had not been described in advance and the selection criteria were characterized by lack of relevant documentation and description of the formal items for decision.
- Risks relating to the EH-101 helicopters were mainly assessed in relation to the procurement per se. Operation and life-span costs were not adequately assessed.

The Defence has not managed the contracting with the supplier in a satisfactory manner. The Defence should have continued the contract negotiations with the supplier to ensure that the contract reflected the level of the operational availability which the supplier could deliver to secure performance of the tasks. Moreover, the Defence's organisation of the contract negotiations could have contributed more to ensure the best possible negotiating position for the Defence.

- The contract for the procurement of the EH-101 helicopters was based on a contract which the Defence had used on a previous occasion when buying aircraft, but the Defence could not during the negotiations obtain the supplier's consent to the wording of the former contract. Rigsrevisionen is of the opinion that it would have been appropriate if the Defence had employed the services of the Attorney to the Government when entering the contract with the supplier. The Ministry of Defence has subsequently called upon the Acquisitions and Logistics Organisation of the Defence to consult the Attorney to the Government for legal advice when procuring equipment. At the same time, the Defence has stated that since 2001, the contract function has been upgraded and professionalized. Rigsrevisionen finds this satisfactory
- It turned out to be difficult for the Defence to assert its claims against the supplier, as the selection of helicopter type and the budget for the procurement had been made public before the contract negotiations were concluded. On the basis hereof, Rigsrevisionen recommends the Ministry of Defence to consider how the process of contract negotiations relating to large-scale procurement of equipment may be organised in the future in order to safeguard the Defence's negotiating position.
- The contract with the supplier does not warrant 80 percent operational availability
 or any specified number of flying hours per year per EH-101 helicopter. In the
 contract negotiations, the Defence should have sought to clarify the expected
 level of operational availability further to ensure that the planned tasks could be
 performed. The Defence did not when the contract was entered report to
 Defence Command Denmark that the contract did not warrant 80 percent
 operational availability. This in spite of the fact that an operational availability of
 80 percent and an average annual number of flying hours of 400 per EH-101
 was not an invariable requirement of the procurement.
- A clarification of the expected level of operational availability might also have provided the basis for a briefing of the funding authorities with respect to the nature of the tasks which the Defence would expectedly be able to perform within the framework of Appropriation 17 10/10 2001.
- The supplier has not during the contract negotiations warranted an operational availability level of 80 percent. After the EH-101 helicopters had been brought into service, the supplier offered the Defence a special service agreement on the same terms as the British Defence, which however, does not warrant 80 percent operational availability. The Defence rejected the offer, firstly because it was considered in violation of the EU's competition rules and, secondly because it was considered too cost intensive for the Defence.
- Rigsrevisionen finds it satisfactory that the Defence has followed up on the contract with the supplier regularly and is currently, in cooperation with the Attorney to the Government, considering advancing possible claims against the supplier in relation to violated warrants.

The Defence has not been able to perform the planned tasks using only the EH-101 helicopters. The reason is that the operational availability has been lower than required, because the level of maintenance has been higher than anticipated, and spare parts have not been available. The search and rescue availability has as of yet not been affected by the lower operational availability because the Defence has kept the S-61 helicopters in operation. The transport task will not be performed in full as planned in 2010 on account of the transfer of six EH-101 helicopters to the British Defence. Performance of all tasks in the future will rely on the Defence's ability to keep the EH-101 helicopters' operational availability at a higher level than so far attained. However, at present the Defence expects to achieve an operational availability level which will permit performance of all tasks.

- The operational availability of the EH-101 helicopters was on average about 50
 percent in the first six months of 2008. The Defence has increased the operational
 availability of the EH-101 helicopters from around 30 percent at the beginning of
 2008 to the current level.
- Based on the actual operational availability of the EH-101 helicopters so far, the Defence has not had disposal of an adequate number of EH-101 helicopters to carry out both search and rescue tasks and transport tasks to the extent planned. The Defence has so far been forced to include also the S-61 helicopters in the search and rescue availability. The transport task will not as planned be performed in full in 2010, on account of the transfer of six EH-101 helicopters to the British Defence.
- At present, the Defence expects to attain a level of actual operational availability which will enable the Defence to perform the search and rescue tasks as well as the transport task.
- The Defence is working on various possible solutions to ensure future performance of all tasks. Rigsrevisionen expects the Ministry of Defence to inform the funding authorities if the performance of tasks changed significantly compared to the starting point, as described in Appropriation 17 10/10 2001.
- Compared to the original expectations, both the burden of maintenance and the mean-time between failure of the EH-101 helicopters have increased significantly and this has had a huge impact on the total level of maintenance and requirement for spare parts.
- The Defence's maintenance organisation is too small to handle the burden of maintenance relating to the EH-101 helicopters, in spite of the fact that the Defence's maintenance organisation is dimensioned in accordance with the supplier's recommendations and in compliance with the maintenance concept of the contract. The Defence has launched several initiatives to counter the shortage of technical staff. Initiatives have included staff rotation and recruitment of flight mechanics, engineers, and flight technicians.
- In Appropriation 17 10/10 2001, the Defence states that the annual operating costs were estimated at around DKK 62 million. This amount did not include payroll costs for technicians and crew, and furthermore a recalculation of the annual operating costs made in 2004 includes more costs elements than those originally included in the Appropriation.
- The Defence expects the operating costs relating to the EH-101 helicopters to increase beyond the amount of DKK 62 million indicated in Appropriation 17

10/10 2001. But at present the Defence is unable to provide an exact indication of the increase which is dependent upon the development in the burden of maintenance. The operating costs for the eight EH-101 helicopters are estimated at about DKK 137 million in 2008. This amount equals the cost level of the entire maintenance organisation for the 14 EH-101 helicopters. To this should be added payroll costs relating to technicians and crew which means that the total annual costs for operational running and maintenance of the EH-101 helicopters amount to around DKK 200 million (price level 2008).

• Early in 2007, the Defence Command was informed of the problems relating to the implementation of the EH-101 helicopters. The Defence Command immediately placed the EH-101 helicopters under increased project supervision in a project organization. Since mid 2007, the Defence Command has worked intensely to clarify the extent and consequences of the problems relating to the EH-101 helicopters, and has taken initiatives to increase the operational availability of the EH-101 helicopters, for instance in cooperation with the supplier.

The Ministry of Defence has kept the Folketing informed of developments in the procurement project on a regular basis. Early in 2008, the Ministry of Defence informed the Folketing of the EH-101 helicopters' lack of operational availability. This briefing took place immediately after the Ministry had learnt about the problems with the helicopters and after the Defence, in the course of the 2nd half of 2007, had conducted a thorough review of the area in order to disclose the problems.

- The Minister of Defence has kept the expanded circle of parties behind the Defence Agreement supporting the procurement of the EH-101 helicopters informed of the procurement project, the delay in delivery of the EH-101 helicopters, and the transfer of six EH-101 helicopters to the British Defence.
- In 2007, the Defence realized that the level of maintenance was on the increase and the operational availability of the EH-101 helicopters on the decrease. The Ministry of Defence was informed formally of this development early in 2008, after a thorough review of the area had been conducted in the course of 2007. Immediately after, the Ministry of Defence informed the expanded circle of parties behind the Defence Agreement supporting the procurement of the EH-101 helicopters about the lack of operational availability.
- The Ministry of Defence has stated that the Ministry, in cases like this, expects to be kept informed by the Defence authorities, as they have done in this specific case. Moreover, the Ministry has stated that according to the Ministry's assessment, the Defence has handled the case in compliance with the procedures agreed between the Defence Command and the Ministry. Rigsrevisionen is of the opinion that the course of events in this case falls within the scope of the procedures agreed.