

AUDIT

Audit of fitness for purpose of reconnaissance drones

armasuisse

KEY FACTS

With a credit of CHF 298 million, armasuisse is procuring an unmanned and unarmed reconnaissance system on behalf of the Defence Group (Group V). The system comprises six drones tailored to the needs of the Armed Forces, ground components, two simulators and logistics components. According to the SAP financing system, at the time of the audit CHF 288 million were committed, so there is little financial leeway, despite considerable challenges.

The project is in both the execution and the introductory stages: Essentially, the systems are still in development although the project team has performed acceptance tests on some subsystems from the Israeli supplier Elbit. According to the 2015 Armed Forces dispatch, the Federal Department of Defence, Civil Protection and Sport (DDPS) planned to complete the project in 2019. At the time of the audit, the head of project had postponed project completion until the end of 2026, although armasuisse has mooted the prospect of a system which, at that time, will not meet key military requirements. This means that the additionally required escort aircraft will cause operating and maintenance costs to be considerably higher than communicated in the 2015 armament programme. The drones will meet all planned military requirements by 2029 at the earliest. In armasuisse's view, the cause of the delays lies mainly with the suppliers RUAG and Elbit, the COVID-19 pandemic and the ongoing conflict in the Middle East.

Further procedure to be clarified as a matter of urgency

There are deficiencies in the coordination of suppliers. Contrary to its original intentions, in this procurement exercise armasuisse has ended up as general contractor in a development project. There is a works contract with Elbit for the construction and supply of drones tailored to Armed Forces requirements, as well as the systems and components needed for their operation. There is another contract with RUAG for an innovative Detect and Avoid system¹ (DAA), with which the drones are to be additionally equipped. As regards Elbit, there are delays, as well as missing functionalities and a lack of quality in the systems supplied. At RUAG, the parties have different interpretations of the contract, especially as regards the scope of supply (service or works). In April 2024, RUAG submitted a request for further funds, which, according to armasuisse, involved a doubling of the new cost ceiling agreed in October 2023. RUAG and armasuisse are in dispute about both the effective amount of the additional funds requested and their legality. At the same time, there are considerable doubts over whether it will even be possible to deliver the DAA on time. The Swiss Federal Audit Office (SFAO) has identified an urgent need for action, to clarify the next steps in the project.

Although the project committee rejected a reduction of the requirements defined in the military specifications in October 2023, it should now carry out a comprehensive assessment of the available options. Both military and civilian requirements are to be reviewed. A comprehensible comparison of total life cycle costs and expected benefits, including risks and opportunities, should be drawn up. The need for changes to the requirements, or the capabilities to be achieved under the project mandate, should be clarified. The aim is to only make investments that generate benefits commensurate with the costs.

¹ Detection and avoidance system for drones, which allows the drone to be flown day and night through all airspace. For further details, see glossary

Project management and coordination are insufficient

The project has taken on the character of a development project and thus carries greater risks and higher requirements in terms of project management and coordination compared to a classic procurement. There are deficiencies in the project organisation and project methodology. The project's plight stems from a combination of overambitious objectives, defective planning and coordination, insufficient risk and quality management, and underestimated complexity.

armasuisse planned to agree works contracts with the suppliers, and intentionally avoided the role of development partner in order not to affect the nature of these contracts. However, the degree of the suppliers' involvement in the project is not in line with tried and tested principles for development projects. Suppliers should be as closely involved as possible right from the start, and should be upgraded to project partners. The current project organisation is hampering the coordination of suppliers. Owing to the lack of overall planning, it cannot be reliably assessed how far the project has progressed, nor when the system will be ready, in the best case scenario. One supplier, Elbit, plans on a rolling basis and has repeatedly missed its deadlines.

There is no overview of all the risks, or of strategies and measures to reduce risk. In addition, the efforts of the quality and risk manager, who supports the head of project supervision, are insufficient. His assessments are not comprehensive enough. Recommendations are imprecise and there is a lack of documented measures to implement these recommendations.

Partial handover and insufficient quality controls generate costs

On 23 January 2023, armasuisse, in consultation with the Armed Forces Logistics Organisation (AFLO), handed over two drones and further subsystems to the Air Force. This runs counter to the usual processes in armaments workflow and has led to additional costs. However, responsibility for the system will remain with armasuisse until project completion.

armasuisse and the Air Force have explained that this unforeseen partial handover has the aim of enabling flight hours to be accumulated and advancing knowledge. The project team based its decision on the airworthiness certificates issued by the Israeli Civil Aviation Authority and the Swiss Military Aviation Authority. Because armasuisse's test pilots identified major quality deficiencies around ten months after the systems were handed over, the Air Force decided not to use the two drones for the time being. The drones have brought no benefit, yet the Air Force has had to perform maintenance on them since then, and AFLO has had to pay the costs in accordance with the service level agreement. As regards the further scope of supply, the project team is faced with a dilemma between swift practical testing with attendant maintenance costs, the possibility of partially using the systems, and insisting on complete provision of supply in accordance with the specifications.