The parental benefit programme[1]

As part of the welfare system in Norway, parents with newborn babies can apply for benefits as compensation for lost salaries during their parental leave. Every year, NAV processes about 180,000 applications for parental benefits or changes to these and distribute EUR 2 billion to parents.

Prior to the parental benefit programme, parents filed applications for parental benefits on a modern web interface. Then, NAV manually entered information from applications on paper into another interface to process the applications. These were then handled using IT solutions running on mainframe computers from the 1970s. NAV received 282,000 telephone inquiries from users on these benefits. The system was described in national media as 'complicated', 'time-consuming' and 'incomprehensible'.[2]

Overall, NAV runs more than 300 IT systems and operated with a model in which large programmes to modernise IT solutions were given to subcontractors. In 2012, they initiated a modernisation programme with a total budget of EUR 330 million to replace systems from the 1970s with a new platform with new services. Shortly after its initiation, 17 development teams recruited from five subcontractors worked in parallel. After nine months, the modernisation programme was stopped because of a lack of progress; the cost was about EUR 70 million. This led to a parliament hearing and the resignation of the IT director and the director of NAV. '*The trust from the ministry was totally broken*', one of our informants in the programme management stated (round 3).

The further modernisation of IT infrastructure was then replanned by smaller programmes seeking to reduce risk, building on known technology and development processes. The parental benefit programme was the second of three programmes, and the aim was to digitise the application process for new parents' parental benefits. Because of a new law, the old system was to be replaced by 1 January 2019.

[1] Dingsøyr, T., Bjørnson, F. O., Schrof, J., and Sporsem, T., "Transitioning from a first- to a second-generation large-scale agile development method: A longitudinal explanatory case study of coordination in a very large development programme," *Work in progress,* 2022.

[2] https://www.vg.no/nyheter/innenriks/i/82rdG/nav-det-er-for-vanskelig-aa-soeke-om-foreldrepenger

The new solution aimed to reduce the number of inquiries by 25%, achieving a self-service rate of 80% and decreasing incorrect payments by 10%. NAV described the goal to be achieved as follows: *'(1) automatic application processing, (2) users can manage their application through the self-service solution and (3) electronic collection of information from caseworkers will provide better quality and more efficiency in application processing'.* (document describing the programme).

The parental benefit programme lasted from October 2016 to June 2019. We studied the main part of the programme, which, at its peak, employed 130 people in 10 teams, of which 100 were external consultants from Alpha and Beta. The programme manager was employed by NAV. The programme depended on functionality in about 20 other systems at NAV.

The programme started by using an internally tailored first-generation large-scale agile development method similar to that used in the Perform programme at the State Pension Fund (Dingsøyr et al. 2018a), with certain changes. There were three planned releases—the baseline, the settler and the digital—all including 50,000 to 75,000 hours of estimated work. Nevertheless, for reasons that will be described in the following, the development model was changed to a second-generation method in October 2018. The programme started with one development team and gradually increased the number of participants to 10 teams, which we describe as a very large programme. We reported the lessons learned from the transformation process in a separate article (Dingsøyr et al. 2021). The whole programme was physically collocated in the same work area, as shown at one time in Figure 3, on two floors. Some participants in the programme had also worked in the Perform programme and had a background in this development method. The programme used a target price contract model (PS2000 SOL) for the first two releases, but this was changed to a time and material model in the second phase.

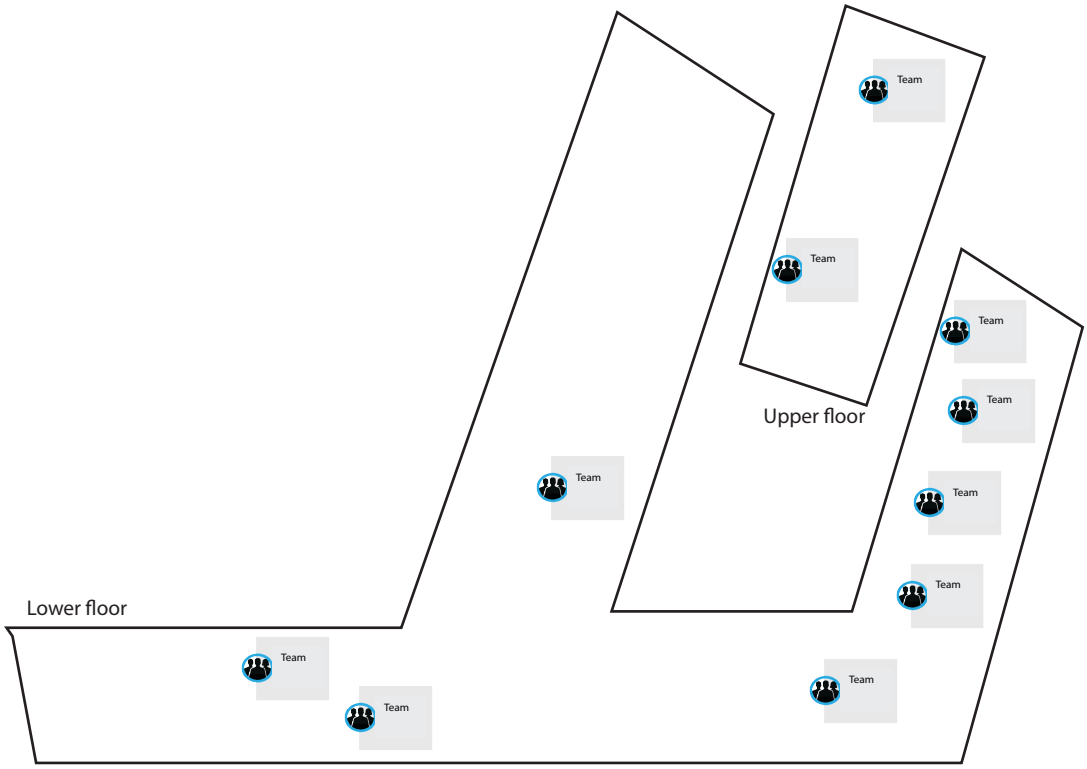

Figure 3 Physical work area where the programme was located in both phases