

Danish electronic



**ASSIGN
BUSTER**

For several years, the company has been participating in various international projects, chosen both because of compensation agreements, and also because of the company's very high quality level, and its ability to speed up the production so that even hopeless matters are on the whole solved satisfactorily from the customer's viewpoint. The amounts involved and the duration of these projects vary considerably. The smallest project may account for 0.5 per cent of the annual turnover of the company, whereas the biggest project may account for up to 40 per cent.

The company endeavours to obtain projects with a constant production and duration of more than three years. In addition to the above mentioned projects Danish Electronics Ltd. has a production of the company's own developments which are supplied to institutions (mainly military institutions) as well as to non-military customers. These products, too, are characterized by a very high quality level and a high degree of reliability. This, in turn, makes it difficult for the products to compete in the nonmilitary market because of too high production costs.

The non-military market makes up 40-50 per cent of the company's total turnover. ORGANIZATION Danish Electronics Ltd. has a staff of about 250. About half of these are salaried staff. (Please see the organization chart above). The research and development department employs about fifty technicians. About half of these technicians and 15 other members of the staff who are paid by the hour carry out development projects and manufacture prototypes for other firms and institutions.

Even though the company had a clear division of functions a precedent had gradually been created so that the individual project managers also handled the interests of their project in the production department, and were able to either speed up or gear down the production of their own product by influencing the foremen. This would for instance be seen in situations with a shortage of components. The project manager would not hesitate to pick up the telephone and personally take care of the ordering of new components. The production department had gradually grown accustomed to this "helping hand".

It was therefore likely to concentrate on the standard production and ensure that this part of the production foremen gave rise to difficulties in coordinating the production, and it was left to the roomer to give priority to the individual projects according to the amount-of pressure they were subjected to. To overcome these problems the management decided that all future projects were to reach Danish Electronics Ltd through the program department, which would pass on the project to the production department. In the production department, all projects would be the responsibility of that department only.

It was to regard the program department as a "customer", and was not allowed to contact the real customer directly. The program department was to act as an "obstetrician" for new rejects, and when projects had been commissioned it was to try to find a new project. THE BACKGROUND OF THE CASE When it was published that Denmark was about to purchase new fighter planes for the Danish Defense Force, Danish Electronics Ltd. Was extremely active right from the start and took part in several negotiations in

connection with the compensation agreements when Danish Electronics Ltd. Liaised that the American F11 plane would be chosen the managing director, the sales manager and the program manager visited the American companies which were likely to be involved in the granting of compensations. When the Danish Minister of Defense signed the contract for the purchase of the F11 planes in August 2006, Danish Electronics Ltd. Was already carrying out markets surveys, and was competing/ co-operating with other Danish firms. After a long period of negotiations the program department made a preliminary offer for some electronic equipment for the American firm B B in January 2007.

The program department, which is extremely experienced in preparing offers, was also quick in making a total offer comprising * the price * a price escalation model * a schedule for the surrendering of documents guidelines for changes * terms of payment * security plans * production schedules with a detailed plan for pre-production and delivery schedules * plan to ensure quality In terms of turnover the offer was quite large and had a duration of six years. On average it would make up about 30 per cent of Danish Electronics Ltd's total turnover.

About the 1st June 2007 Danish Electronics, Ltd. Went into negotiations of points of fact with regard to the electronic equipment, and about the 1st August the contract for the supply of initially 257 units of electronic equipment-with the first installment livelier on the 1st March 2008 was signed. THE START OF THE PROJECT Now that the order had been secured the next step would be to involve the meetings to which representatives

from the production-department were invited and informed about the program department's knowledge of the project.

At these meetings the production department is given the plans prepared by the program department and approved by B- B, control systems, reporting systems and very demanding working instructions. It took some time before the production department gained so much insight that they were able to take over the control of the project. Not until about four months before the first installment was to be delivered had the production department acquired the necessary knowledge of the project and was in a position to plan the capacity.

Normally, there is a throughput-time of one year from the purchase order is issued by the purchasing department until the consignment is dispatched by the dispatch department. To overcome the problem of long delivery times for materials and components the program department had borrowed all the materials for the first 50 ship-sets from B-B so that the production department would not have any robbers with materials. At the end of March 2008 the program manager realized that Danish Electronics Ltd. Would only be able to deliver 20 per cent of the quantity agreed upon for the March April installment.

Also, the costing showed that on average the production time, not only for the two sets which had already-been delivered, but also for all the units produced so far was 165 per cent higher than the production time on which the offer was based. The reporting from the production department was always both delayed and inaccurate -when it reached the program

department. The program manager had on several occasions found considerable differences between the reports received and the real state of affairs in the production department.

B B complained to the management of the delayed deliveries and the-inaccurate reporting, and the management started considering * whether the functional organization structure was well suited to handle this type of projects * and if it was not, preparing a proposal for a new organization chart which would pay more attention to military projects.