Mobile ICT, the Development of the Past 30 Years

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Summary

During World War II, radio communication between tanks, flights and mobile army units demonstrated the great gains, which mobile radio communication can deliver. In Denmark, that came through the war relatively unharmed, Great Nordic explored the possibility of founding a new industrial activity: STORNO, in 1948, based on mobile communication. This would turn out to be a groundbreaking further development of a proud Danish radio tradition, in direct continuity of the "Poulsen Arc", M.P. Pedersen, Elektromekano as well as P.O. Pedersen's professorship from 1912 on the subject of telecommunication.

In the 30 years since NMT (Nordic Mobile Telephony) was introduced in 1984 the fixed telephone network, as the dominant ICT infrastructure, has been replaced by mobile technologies like GSM, LTE and 5th generation, having substituted our 130 years old analogue telephone network. Services as Netflix and LTE are even competing DVB-T broadcasted TV!

We have seen ICT change during the 1980s, a period where the analogue systems, one by one, was digitized and combined with the IP technology, leading to a world with a complete fusion of the different elements in ICT, as ICT is becoming a more and more important infrastructure in the modern society!

Aalborg University, as personalized by Professor Jørgen Bach Andersen, has played a dominant role here. The first "European Digital Radio Engineers" were educated here. It soon led to a booming Danish mobile industry. In year 2000 the "Danish Radio Society" was so strong, that all players in the global mobile industry had development facilities in either Aalborg or Copenhagen. In that year also 60% of all global GSM type approvals were done at Telelaboratoriet by TDC in Taastrup, Copenhagen.

The present Danish frame conditions, in regards of production, are unfortunately the reason that no mobile industry exists in Denmark today. This development is completely parallel to the fate of the TV industry in Denmark. In 1963, 350.000 TV sets were produced each year by 16 competing factories – now "only" B&O is left!

Mobile ICT is now changing our society, Twitter and Facebook are the sources of the most mobile data communication, and the mobile possibility of being on the INTERNET around the clock now takes more of our time than even TV. PDAs are used extensively in the social and health care sector, and many remote control functions are performed by APS on them. The mobile communication computer, "Smart Phone" is even substituting our PC and credit cards: **"The money has gone mobile"**.

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