



NORWEGIAN DEFENCE AND SECURITY INDUSTRIES ASSOCIATION (FSi)

THE LEADING ASSOCIATION IN NORWAY ADVOCATING THE INTERESTS OF ITS SECTOR, AND THE PRIMARY INTERLOCUTOR FOR THE GOVERNMENT IN MATTERS OF IMPORTANCE TO THE INDUSTRY. AFFILIATED WITH THE CONFEDERATION OF NORWEGIAN ENTERPRISE (NHO) AND REPRESENTING MORE THAN 100 COMPANIES

LEDEREN HAR ORDET:

Finanskrise - forsvarsindustrien gir muligheter

Det er nå snart ett år siden den globale finanskrisen traff Norge med full kraft. Verdiskapningen i landbasert industri har falt dramatisk det siste året og arbeidsledigheten vokser i høyt tempo, særlig i leverandørindustrien til konjunkturutsatte bransjer som f.eks bilindustrien. Fallet i oljeprisen har ført til at også investeringer i innenfor utvinning av olje og gass kanselleres eller utsettes. Dette rammer bedrifter, lokalsamfunn og enkeltpersoner som opplever usikkerhet og økonomisk tilbakeslag som følge av krisen.

Derfor er det gledelig å registrere at siden krisen traff med full kraft har norske bedrifter vært i stand til å vinne store forsvarskontakter internasjonalt. Disse kontraktene gir bedriftene oppdrag i flere år fremover og sikrer kompetanse, arbeidsplasser og fortsatt positiv utvikling hos flere av de store forsvarsleverandørene. Det gir også ringvirkninger i form av oppdrag til flere hundre små og mellomstore bedrifter i mange lokalsamfunn. På denne måten bidrar forsvarsindustrien til å begrense skadevirkningene av krisen.

Regjeringen la nylig frem den årlige stortingsmeldingen om eksport av forsvarsmateriell. Denne viser at i 2008 eksporterte

norsk industri forsvarsmateriell og tjenester til en verdi av i overkant av 4 mrd. kr. Dette tilsvarer en økning på 17 % fra 2007. 92 % av eksporten i 2008 gikk til NATO og de nordiske land. Dette viser med all tydelighet at norsk forsvarsindustri er internasjonalt konkurransedyktig.

Det er ikke gitt at denne utviklingen vedvarer over tid med mindre forsvarsindustrien fortsatt sikres stabile rammebetingelser og myndighetene fortsatt aktivt bidrar til å sikre industrien markedsadgang og tilgang til teknologi, bl.a. gjennom å kreve gjenkjøp ved anskaffelser fra utlandet. Lukkede markeder og begrensninger i.f.t. utveksling av informasjon og teknologi er handelshindringer som norsk forsvarsindustri møter hver dag.

Det er lite som tyder på at situasjonen på kort sikt vil endre seg vesentlig til det bedre. Ettersom konsekvensene av finanskrisen blir stadig større i mange land, ser vi derimot klare tegn til at nasjonene reduserer sine forsvarsbudsjetter. Samtidig øker det politiske presset for å sikre at det som fortsatt investeres i forsvaret også gir økonomiske ringvirkninger nasjonalt. På et tidspunkt skal også de store underskuddene i mange lands offentlige budsjetter, som følge av de mange krise-

tiltakene som er iverksatt, dekkes inn. Ytterligere kutt i forsvarsbudsjettene, og da i første rekke investeringer, er en sannsynlig konsekvens de nærmeste år. Da blir det utfordrende for norsk forsvarsindustri å opprettholde sin markedsandel i eksportmarkedene.

En av de viktigste årsakene til at forsvarsleverandørene er mindre hardt rammet av krisen enn mye annen industri, er den langsiktigheten som er typisk for bransjen og begrenset risiko for manglende gjennomføring av inngåtte kontrakter. Store forsvarskontrakter gjennomføres over mange år og ettersom sluttkundene er andre lands myndigheter er det svært liten risiko for at inngåtte kontrakter kanselleres eller at betaling uteblir. Det innebærer imidlertid også at det norske forsvarsleverandører skal leve av om fem eller ti år avhenger at nye store kontrakter sikres også i de nærmeste årene. Noe som av nevnte årsaker kan bli svært utfordrende. Derfor er det avgjørende viktig at den suksess bransjen har opplevd de siste årene ikke blir en sovepute, men at arbeidet med å bedre rammebetingelsene og å øke markedspotensialet internasjonalt intensiveres i et tett samspill mellom myndighetene og industrien.

Norge står foran store forsvarsanskaffelser i de kommende år som blir helt avgjørende. Stortinget har nylig behandlet anskaffelsen av nye kampfly til Forsvaret. I denne forbindelse registrerer vi med tilfredshet at det er bred oppslutning i alle politiske leire om at det er en forutsetning at dette prosjektet skal gi norsk industri oppdrag som minst tilsvarende omfanget av anskaffelsen. Stortinget behandlet også for noen dager siden anskaffelsen av nytt artilleri til Hæren, som det planlegges å anskaffe i samarbeid med Sverige. I denne forbindelse sluttet Stortinget seg til at prosjektet skal gi en balansert industri-deltakelse mellom norsk og svensk industri og at dersom det skulle vise seg at prosjektet ikke kan gjennomføres på en tilfredsstillende måte, så vil Norge gjennomføre en anskaffelse i åpen internasjonal konkurranse.

Dette er viktige politiske signaler for forsvarsindustrien som vi nå forventer at raskt følges opp slik at nødvendige tiltak iverksettes. I en tid da de fleste andre eksportrettede næringer sliter, viser forsvarsindustrien at norsk høyteknologi er konkurransedyktig også i krisetider. Dette er tiden for forsterket satsning på forsvarsindustrien.



P.O. Box 5250 Majorstuen,
NO- 0303 Oslo. NORWAY

Tel: + 47 23 08 80 00
Telefax: + 47 23 08 80 18

E-mail: fsi@nho.no
Internet: www.fsi.no

EPICOS

EPICOS offers Norwegian industry a database for the purpose of locating co-operating partners and suppliers all over the world. The offer is at no cost to the industry for the first four years, as the service is covered through the offset obligations of Lockheed Martin towards Norway.

Our database is particularly significant for companies with offset obligations in other countries, as we can in a simple and efficient manner offer knowledge about local industries to foreign companies, says Jacques Chahal-Purewal, vice president for international Business with EPICOS.

- And this is not something we are only offering to the biggest companies; to us, it is at least as important that even the minor companies can make use of our database.

In connection with the Norwegian competitive fighter plane acquisition, both Eurofighter and Saab put great efforts into determining opportunities for co-operation, including ways in which the offset obligations could be carried through in as favourable a manner as possible.

- When the issue is related to huge defence contracts, the major players can afford to send its representatives into a country in order to conduct this kind of fact-finding missions, Chahal-Purewal explains.

- But this is a very costly way of locating co-operative partners, and it will rarely be possible for a smaller company

that has been assigned a smaller contract, and thereby assumed an offset obligation, to send in their own people to perform this type of information gathering. This is accordingly one of the areas in which the EPICOS database can be an effective and cost-reducing means.

- Granted, you can look up the Web sites of the different companies on the Internet, but it has been our experience that these sites have a tendency to being less than completely objective in terms of presenting the real competencies of a company, Chahal-Purewal continues. We have seen actual examples that major international companies have spent valuable time and money on travelling to visit a local operator due to their own presentation on the Internet, only to find that the company is unable to deliver according to the claims on the Web side.

- And this is the other aspect of our database. We do not only enter the company information in a systematic and uniform manner. We also put a lot of effort into clarifying and accentuating the particular competencies of the different operators, so that these aspects



Jacques Chahal-Purewal, vice president for international Business with EPICOS, offers Norwegian businesses free participation in EPICOS database. EPICOS cooperates with EXOSTAR, an electronic supply chain platform that is owned by Lockheed Martin, Raytheon, Rolls Royce, British Aerospace (BAE), and Boeing. While EXOSTAR is a platform that these huge companies use in order to find sub-contractors, MFG Sourcing Parts is an open system that is available to large and small businesses alike, for the location of suppliers, contracts and collaborating partners, says Chahal-Purewal. All participating Norwegian companies will be integrated into Exostar and Epicos for a period of 4 years, but a select number of companies will be integrated into MFG Sourcing Parts for 4 years also.

in particular can be made clear to the international market.

- In addition to operating our database, we also work on analyses of businesses and markets.

Regarding business analyses, we are looking at capabilities, human resources, equipment resources and market opportunities.

These analyses we can later correlate to other analyses of other companies on a global basis, thereby determining what types of technology companies are in need of. This opens up whole new vistas for co-operation and further technology development.

EPICOS is originally a Greek company, launched in 2000. As of today, EPICOS has offices in Athens, Switzerland, and USA. The company has a staff of about 25 people, most of whom hold a Master's or PhD degree. EPICOS also cooperates broadly with a number of universities and research institutions all over the planet, and is able to call upon personnel resources from these environments as required for specific needs. This means that EPICOS can dispose of a further 140-150 highly educated persons who can be drafted whenever the need arises.



A GLOBAL MILITARY SUPPLIER

www.vinghog.com

INFO-ERFA 2009

This year's INFO-ERFA Conference was held at the Soria Moria Hotel and Conference Centre in Oslo on 21 and 22 April this year. The Info-Erfa Conference is FSI's most important arrangement all year. This year's conference was undoubtedly the largest ever, with more than 200 delegates representing the defence and industrial sectors.

This year's introductory speaker, Chief of Defence, General Sverre Diesen, gave his views on the question: What is happening with Defence and where is it going?

"From a 5 to 10 year perspective, I largely believe that cost developments and technological innovation are the two most predominant parameters for developments at Norwegian Defence. We will continue to see rising costs for military materiel because of technological developments. Performance is raised somewhat, which means defence expenditures are increasing at a higher rate than the consumer index. Modern technology is decisive for modern armed forces, so we cannot simply ignore these developments if we want to reach any of our objectives," Diesen emphasised, also

stating that "the development of a network-based defence is important."

"Network capacity can truly multiply the usefulness of existing platforms," Diesen says.

"On a larger geo-political level, potential conventional conflicts along our own borders will still be the main reason for developments at Defence. Our own borders will determine how we construct our national defence structure," Diesen said, mentioning in particular Russia's operations against Georgia last year. "That was a carefully planned operation, yet we were still unable to detect its planning," explained Diesen. "Short warning, localised forces, air penetration and the operation's short duration (with the international community in mind) are all characteristic of this operation. The point at

which Russia would dare use military force in Western Europe after this will probably be higher, but in case of any show of force their military signature will probably be of the same intensity as in Georgia."

"The greatest threat at home then is for conventional conflicts of limited duration. For Norway this threat is greatest in air and on sea. In today's situation, the Army is feeling pressure to delivery on many fronts around the world. But it is wrong to move resources over to the Army, because our own national borders are the most important arena for our defence, and the greatest threat is found on sea or from the air. If the Army does not have the resource it needs to deliver, then the Army must reduce its level of ambition for foreign missions. The Afghanistan conflict is asymmetrical. To put it bluntly, the enemy's strategy there is to drag out time so we get tired of Afghanistan before the Taliban do, which evidently makes extra work for the Army and ground forces. But in my opinion, if we allow our defence structures to be influenced by the demands of an asymmetrical conflict, then we are entering a dangerous path. If we choose to do things like this, we must at least know what we are getting into."

Compulsory Military Services versus Recruitment

The Chief of Defence also spoke about the relationship between cost-of-training and compulsory military service, citing the Air Force's NASAMS II system as a good example.

"The primary objective of NASAMS II is to protect our fighter aircraft. In a modern conflict, a system like NASAMS

is very important in the opening phase of a conflict. Training conscripts to operate a NASAMS II system takes about 9 months. That only leaves three months of service during their compulsory service, after which we need to begin training new conscripts all over again. This means the operational capabilities of the NASAMS system are very limited if this kind of training cycle is used, and in practice the system would not be able to protect more than one air base at a time. Coincidentally, it would be nice to be able to spread fighter aircraft to a number of air bases and when necessary send them to deployment bases for the very reason not to be vulnerable during the opening phase of a conflict."

"This example also shows us how expensive this model is. Air defence then has a production model that produces instead of having operative capacity. In my opinion, it will be important in the future to clarify the essential balance between recruited soldiers and conscripts, in order to have our advanced systems functioning in a rational, economic and operative manner."

"Beside this, and where development at Defence the next 5 to 10 years is concerned, I see the volume of defence forces diminishing. We will still be affected by problems of critical mass. The solution lies in a multi-national approach; the first prerequisite for cooperation is synchronised systems and possibilities for cooperation in areas of joint training, joint exercises, and joint organisation for common concepts, doctrines and divisions."

"Defence reductions are offensive to some people, when we discuss how large



Brigadier Asle Kjelsberg (left) and Major General Trond Karlsen.

Photo: MilitærTeknikk



A full house and high-profile speakers show that both industry and Defence consider the Info-Erfa Conference to be a very important meeting point. Photo: MilitærTeknikk

Norwegian Defence should be. These conceptions belong to earlier times.”

“From my standpoint, if we get involved in a major military conflict at home that is too big for our own forces to tackle, the conflict will become an international military operation where the Norwegian contribution will be part of a larger response,” Chief of Defence Diesen concluded.

Major General Trond Karlsen, Head of the Norwegian Defence Logistics Organisation (FLO), spoke about the challenges to materiel administration.

“FLO has nearly 6000 employees, which amounts to about one-third of all persons employed at Defence. FLO also has about 950 conscripts and 200 apprentices, and administers about 50 % of the Defence budget,” said Karlsen in his introductory speech, mentioning that FLO was the second largest contributor of personnel to ISAF.

“Our greatest challenge is to create a better balance between the logistical needs of operative activities and our ability to deliver.”

“Following this are the challenges to administration of personnel, IT support for the logistics process, reorganisation, continual and ongoing

improvements, international cooperation and outsourcing,” Karlsen continued, saying “Still, it has been somewhat easier to get personnel this year, maybe because of the finance crisis.”

Coincidentally, Karlsen hoped for more personnel in uniform, as this is the group that would be deployed to international operations.

Karlsen also talked about outsourcing and co-operation with the industrial sector.

“The Report to the Storting (STP) number 38 clearly alludes to increased support for cooperation between Defence and Norwegian industry. Even though STP 38 is concerned with procurement, in my opinion the report also gives a clear signal about cooperating with industry where operation and maintenance issues are concerned. Operation and maintenance represent great challenges for FLO in the future,” the head of FLO said in conclusion. “Even though many actions are currently being taken to reduce operational and maintenance costs, ever more advanced systems will lead to both doubling and tripling of lifecycle costs.”

Brigadier Asle Kjelsberg began his speech by saying that this was the fourth and last time he would hold a speech at the Info-Erfa Conference. “Pretty soon I will be replaced by four



“Network capacity can truly multiply the usefulness of existing platforms,” Chief of the Norwegian Defence, General Sverre Diesen says. Photo: MilitærTeknikk

people,” Kjelsberg said with a smile.

Kjelsberg discussed a number of the large projects that Defence has been working on, among these were: platform lorries, new logistics vessels, our own military satellite and the coming contract for developing the JSM (Joint Strike Missile, the ground target missile for the F-35 JSF).

Kjelsberg emphasised in conclusion that more interest will be focused on strategic choices in the future when large

materiel investments are made, particularly in finding more options to choose from.

“Missions like those we are presently involved in, like Afghanistan, put a great strain on land-based elements like vehicles. This leads to the need for replacements and repurchases, but we cannot replace our entire fleet every 6 to 7 years. This is why we depend on suppliers that can supplement us with extra materiel as units are worn out,” Kjelsberg concluded.

Sea Systems Program Conference

The Sea Systems Program Conference began on 19 May this year. This is the last of FSI's program conferences before summer. Naval Defence is currently working on a number of projects of interest to industry. There are also many opportunities for industry in areas of operation and maintenance of naval vessels.

Lieutenant Colonel Svein Arne Besserudhagen described the implications of the Perspective Materiel Plan (Perspektivplan Materiell).

"The Perspective Materiel Plan tries to look into the future for the next 20 years. Of course, after 10 to 15 years this picture will be somewhat vague. Still, we can begin preparing investments that we know will come. For example, we know in the next 20 years we will need to invest in our frigates, in terms of technical navigation and operational aspects, in addition to weapons systems."

"Put in simple terms," Besserudhagen said, "it should not be any surprise to us that old aircraft have rickety wings."

In his speech, Commander Senior Grade Ole Bosse described the naval challenges Norway now faces.

"Russia is currently showing far more activity in our sphere of interest," concluded Bosse, adding that "the challenge is now to procure enough materiel and ideas to meet our future operative needs."

Bosse mentioned some specific projects currently in the works, such as programs for updating the ULA Class submarines and mine clearing vessels.

Work is also being done to procure new anti-sub torpedoes.

"We planned to replace Combat Boat 90 in 2012, but after a recent study it was decided that our current vessels shall remain in use until at least 2015. We are also considering

procurement of new anti-aircraft missiles with greater range for our frigates, which will probably not arrive until after 2015."

Logistics vessels:

Major Steffen Evju described the logistics vessel project.

"The new logistics vessels will give Norwegian naval forces greater strength, perseverance and flexibility in ways not possible with the current logistics vessels," Evju emphasised in his introduction. The new vessels will give support to operations and exercises on national and international levels.

"As of today we have all the basic documentation prepared, and quality control evaluations have been done by external sources," Evju continued to say. "We expect to receive orders to carry out this assignment in early fall of this year, and a contract will be ready no later than 2010. The vessel will then be ready for delivery in 2013 and be operative from 2014."

"This procurement is planned for execution as an ordinary materiel investment through an international competition," Evju explained, adding that "Many nations purchase similar vessels and we will be evaluating the possibility of different forms of international cooperation."

"But in our opinion, it is not easy for us to compromise operative requirements, which makes it difficult to enter an external series."



Major Steffen Evju (left) and Senior Advisor Heidi Nordås from the Ministry of Defence.



Commander Senior Grade Ole Bosse (left) and Knut Moe, the head of the investment department at Håkonsvern Naval Base.

Senior Advisor Heidi Nordås from the Ministry of Defence asserts that the Ula Class submarines will reach terminal technological end-of-life in about 2020.

A work groups is considering three primary conceptual alternatives:

- 1) Phase-out the submarine flotilla
- 2) New submarines or service-life extension of existing Ula Class
- 3) Alternative solutions

So far, we have evaluated a number of different solutions, but none of these gives us the same effect as a submarine," says Nordås, adding that "There has been some dialogue with Sweden to assess the possibility of co-operating in a future purchase. Regardless of the outcome, it will not be a valid topic for Norway until after 2020, partly because of the service-

lifetime of today's Ula Class, and partly because the procurement of new fighter planes has tied up new investment budgets."

Knut Moe, the head of the investment department at Håkonsvern Naval Base, gave us an overview of the great many possible projects that might arise in the future, mentioning a long list of projects. Among these were the procurement of training mines, Hugin serial procurements, stabilizer fins on the NoCGV Svalbard, new offshore coast guard vessels and upgrades to the Nordkapp Class. Knut Moe also mentioned purchases of wire-guided single-use weapons for launching naval mines. The Minesniper was mentioned as a very realistic candidate in relation to this last item, considering that Spain has already purchased this Norwegian weapon system.

Program Conference on Air Systems

Towards the end of March, the second of the spring series of the Defence Ministry's program conferences held in collaboration with The Norwegian Defence and Security Industries Association (FSi). This time it was Air Systems who were given the chance to present their plans, and the opportunities these entail for Norwegian industry.

- "Program Air" has a total portfolio of some 18 billion NOK, or 2 BEUR, for the period of 2009-2016, was the initial message from André Sorli from the Ministry of Defence, adding that the lion's share of this portfolio will be earmarked for the fighter plane project. The fighter plane project and JSM (Joint Strike Missile) are administratively sorted under Air Systems, but until now our involvement with this project has been quite limited. It is anticipated fighter plane project and related projects hereto will be pulled out of the "Program Air", to be established as an autonomous programme.

Lt. Col. Øystein Vollstad broached the subject of the F-16, and pointed out that there are still a number of projects related to these airplanes.

- The F-16 aircraft have an 8,000 hour fuselage, which means that the planes will "die" at some point in time between 2018 and 2022. We will nevertheless continue to conduct upgrades and further develop both planes and equipment through the coming years, so that our F-16 fleet will be right up there with anything else aloft even in 2018-22, Vollstad explained, noting that there are current projects in the area of helmet sights and procurement of all-weather precision bombs (GBU 54) for our F-16 fighters. That said, the number of major projects remaining in the F-16 programme is probably quite limited, with the above men-

tioned upgrades and the procurement of new AMRAAM missiles as a possible last major project.

P3 Orion

Major Kenneth Øvland reviewed the future for the P3 Orion surveillance planes, and initially concluded that as the airplanes are now equipped with new wings, the Orion fleet will remain in operation until about 2030. It is, however, anticipated that the operative role of these planes will be shifted from classical anti-submarine warfare and sea surveillance to a more general role in support and information gathering, and forwarding of information. The primary role will still be anti-submarine and surface warfare, but the planes will also be able to assist in general information gathering, and support to shore operations.

More specifically, the airplanes will gain capabilities such as live information transfer. Moreover, one of the planes will be getting SAR radar, and it is likely that new anti-submarine torpedoes will be acquired for the Orion planes. The Sting Ray torpedoes that the Navy is procuring for the NH 90 helicopters are as of today not adapted for use on our Orion airplanes.

- In general, we run with the power users as far as Orion is concerned, which means the US Navy. The concept of procuring Norway-specific solutions has always turned out to be very expen-

sive, in the short as well as the long run, said Øvland in conclusion.

Lt. Col. Pål Christiansen from the FD gave a briefing on the possible project MP-7628, to provide the brigade's manoeuvring units with air defence systems.

- What we need is a system to fill an operational gap, said Christiansen, adding that a work group has recently submitted a conceptual study to the Department of Defence.

On what type of vehicle any such air defence system should be deployed, is as yet to be determined. From before, the CV 90 has been put forward as a possible platform, but today, there is a number of vehicle projects in the works in the Army, and a degree of flexibility is desired regarding a future platform for air defence. If the project is approved, the suggested procurement cost will be in the range of 100 to 300 MNOK, or 11 to 33 MEUR.

Christiansen could also confirm that the NASAMS II will prevail, and will be carried forward in the Norwegian Armed Forces.

Jon Gunnheim, deputy director in the Department of defence, broached the subject of the industrial opportunities associated with the procurement of new fighter planes.

At the outset, the Government is requesting industrial participation corresponding to the outright purchase cost of the airplanes, which is a relatively broad-pencilled requirement.

In connection with the fighter planes, the Government sees four areas of national focus areas:

- JSM

- 25 millimetre ammunition
- Product life cycle support-based products/systems
- Advanced composites

What we want is to build long-term industrial alliances, not just with Lockheed Martin, but also with subcontractors and suppliers to Lockheed Martin, said Gunnheim, adding that one is also envisioning Lockheed Martin in the role of door opener in other areas.

- Norwegian businesses must be prepared to make investments in both competence and product quality in order to gain a foothold in the F-35 project, but we have to view this as a unique opportunity, and not just as an expense, emphasised Gunnheim in conclusion.

Lt. Col.
Øystein
Vollstad



Major
Kenneth
Øvland



Lt. Col.
Pål Christi-
ansen, FD



Jon
Gunnheim,
deputy
director
in the
Department
of defence

