The Kongsberg cluster comprises knowledge-based companies, several of which are world leading in demanding industries like subsea, maritime, automotive, aircraft, defence and aerospace industries. Many of the core companies grew out of civilian divisions of Kongsberg Våpenfabrikk (defence industry). The cluster has generated new industries and value creation using brainpower, expertise and collaborative solutions. The cluster leads Norway in industrializing major technological innovations and has achieved a key position in global markets.

**Background**
During the past 20 years, the companies in the Kongsberg cluster have increased their number of employees from around 4,500 to 18,000, of which approximately 6,000 work in the Kongsberg region. In the same period, turnover has increased sevenfold, totalling approximately NOK 25 billion in 2007, of which exports comprise approximately 70% (2007).

R&D investment in Kongsberg totals approximately NOK 1.4 billion (2006), corresponding to 10% of all R&D investment in Norwegian industry. The cluster has industrialized a range of technologies developed by the Norwegian University of Science and Technology (NTNU), the SINTEF Research Group, the Norwegian Defence Research Establishment (FFI) and other R&D institutions. Cluster companies include Kongsberg Gruppen, Kongsberg Automotive, FMC Technologies, Volvo Aero Norge, Dresser-Rand, Esko Graphics, Kongsberg Devotek, Kongsberg Safety Systems, Argos Control and several more. The companies have both national and international owners, and are represented in more than 40 countries.

**Facts about the Kongsberg Industry**
- Aircraft engines – Approximately 70% of all Boeing and Airbus aircraft have vital engine parts made by Volvo Aero Norge. These parts are produced exclusively in Kongsberg
- Automotive – Roughly 50% of the world’s car manufacturers have products from Kongsberg Automotive
- Subsea – FMC Technologies in Kongsberg is world leading in the delivery of underwater production systems for the oil and gas industry
- Defence – Kongsberg Defence & Aerospace has developed the world’s most advanced naval strike missile. It is developed and produced in Kongsberg
- Space – Kongsberg Defence & Aerospace is Norway’s largest space company
- Maritime – Kongsberg Maritime has a leading global position in the market for dynamic positioning systems and is the world’s largest in the field of marine automation
- Offshore – Gas turbines and compressors from Dresser-Rand in Kongsberg ensure 70% of the production of the Norwegian oil and gas industry

**Core Competence is Systems Engineering**
The core competence for the companies within the Kongsberg cluster is systems engineering. Systems engineering is an interdisciplinary approach and aims to enable the successful realization of complex systems. It focuses on defining customer needs and required functionality early in the development cycle, documenting requirements, subsequently proceeding with design synthesis and system validation while considering the complete problem for the system’s entire lifetime.

**Unique Master Degree programme in Systems Engineering**
The Kongsberg cluster companies have initiated a Master Degree programme in Systems Engineering (MSSE). The programme is established at Buskerud University College in Kongsberg in cooperation with Stevens Institute of Technology in New Jersey, USA, and the Kongsberg industry. This programme is the first MSSE in the Nordic countries.