

# Arctic Warrior Experiment 2022

Arctic Warrior Experiment is an arena where the Norwegian Armed Forces and the Norwegian Defense Research Establishment invites the industry to come up with innovative solutions to strengthen our own and allied soldiers ability to operate in an arctic environment. Defense industries all over the world deliver a range of new technologies to help soldiers perform at their highest level, but not all of these technologies are rugged enough to withstand the cold arctic climate in the high north. Through Arctic Warrior Experiment we seek to motivate Norwegian and foreign industry to develop equipment and technology for soldiers that are suitable for use in the harsh arctic environment. We want to give the industry the opportunity to experiment together with Norwegian and foreign military personnel with the aim to develop new and innovative solutions to challenges related to operations in arctic conditions.

## Areas of interest:

- Camouflage and/or signature reduction against advanced opponents
- Arctic Mobility
  - Light weight motorized mobility in cross-over conditions (winter-spring / autumn-winter )
  - Navigation systems that enables vision through fog and snow drift. To detect safe path in zero visibility conditions.
  - Steep terrain ski boots adapted for long sustainment in arctic conditions
  - New solutions for skins when ski-climbing or randonee. New glue or products that simplifies the process when using skins. adapted for long sustainment in arctic conditions
- Battery and power supply
  - Battery and power supply for operating BMS and small units requiring electricity. Lightweight solutions adapted to a cold climate (-20°C)
  - Battery and power supply technology for long term operation of man-portable sensor systems adapted to a cold climate (-20°C)
- Fog and icing challenges
  - Anti-fog and/or icing solutions for lenses, spotter scopes, sights and other sensors
  - De-icing and/or anti-icing solutions for UAV
- Active heating products

- Products to prevent hypothermia in medevac situations
- Medic products to treat (open) wounds in arctic medevac situations
- Heating products for the operator in arctic maritime operations
- Mobile communication systems (communication chain relay or transportable communication system) for establishing and maintaining a safe communication infrastructure in the arctic (above 75°N)
- Nanosatellites for use in the arctic (above 75°N) & adapted payloads (communication, effectors or sensors)
- Concepts for better anti-access and anti-denial in contested environments
- UGV and UAV systems specially adapted to arctic terrain and conditions. & adapted payloads (communication, effectors or sensors)

### **Submit a one-pager:**

If you or your company has a proposed solution to one of the areas of interest listed above, submit a one-pager where you describe your equipment and how it may contribute to solve our challenges. If you or your company have possible solutions to more than one area of interest, we ask that you submit a one-pager per proposed solution/equipment. For a proposed solution to be considered it has to be possible to develop a useable prototype ready for the winter of 2022. The received one-pagers will be evaluated and the Norwegian Armed Forces and the Norwegian Defense Research Establishment will invite a selection of companies to join us at the Arctic Warrior Experiment in Norway in February 2022.

Deadline for submission of one-pager: 01.12.2021

Submit to: [sord@ffi.no](mailto:sord@ffi.no)

All questions regarding Arctic Warrior Experiment must be routed to [sord@ffi.no](mailto:sord@ffi.no)

Costs incurred by the contractor in connection with the preparation and submission of the one-pager or participation at the Arctic Warrior Experiment will not be refunded. Participation in this Arctic Warrior Experiment will not in any way commit the Norwegian Armed Forces and/or the Norwegian Defense Research Establishment to enter into contract with the contractor, or impose any type of economic obligations upon the Norwegian Armed Forces and/or the Norwegian Defense Research Establishment towards the contractor.