

Weather radars in Sweden, Finland, Estonia, Latvia, Lithuania, Belarus, Poland, Germany, Denmark and Norway

## What does baltrad offer you?

Accurate precipitation information supports weather forecasts, and helps to optimize activities for several sectors of the economy.

- BALTRAD develops the next generation weather radar network in the Baltic Sea Region facilitating the exchange, production, and use of real-time weather radar data.
- BALTRAD delivers accurate, timely, and high-resolution information about rain, snow, hail and wind to help save lives, infrastructure and property.
- BALTRAD wants to attract local and regional bodies to use the radar-based information to improve their services for their citizens.

## About baltrad+

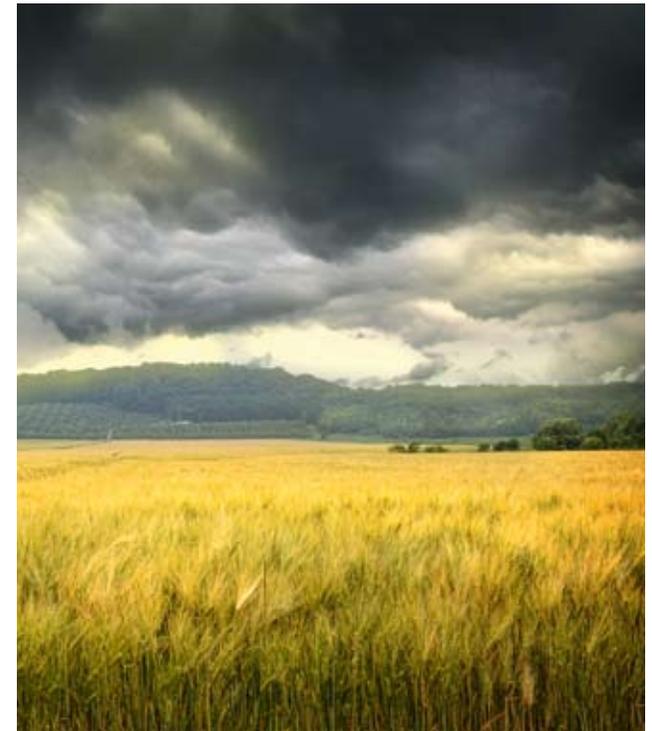
BALTRAD+ is a project lasting for 2.5 years (Oct 2011 – April 2014).

Co-funded by the European Union's Baltic Sea Region Programme.

Project partners:

- Swedish Meteorological and Hydrological Institute, [www.smhi.se](http://www.smhi.se)
- Finnish Meteorological Institute, [www.fmi.fi](http://www.fmi.fi)
- Institute of Meteorology and Water Management, Poland, [www.imgw.pl](http://www.imgw.pl)
- Latvian Environment, Geology and Meteorology Centre, [www.meteo.lv](http://www.meteo.lv)
- Danish Meteorological Institute, [www.dmi.dk](http://www.dmi.dk)
- Lithuanian Hydrometeorological Service under the Ministry of Environment, [www.meteo.lt](http://www.meteo.lt)
- Republican Hydro-meteorological Centre, Belarus, [www.pogoda.by](http://www.pogoda.by)
- Radiation and Nuclear Safety Authority, Finland, [www.stuk.fi](http://www.stuk.fi)
- Estonian Meteorological and Hydrological Institute, [www.emhi.ee](http://www.emhi.ee)
- Aalborg University, Department of Civil Engineering, [www.civil.aau.dk](http://www.civil.aau.dk)
- Aarhus Water A/S, [www.aarhusvand.dk](http://www.aarhusvand.dk)
- Norwegian Meteorological Institute, [www.met.no](http://www.met.no)
- German Weather Service, [www.dwd.de](http://www.dwd.de)

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baltrad+



## An advanced weather radar network for the Baltic Sea Region

The new radar network delivers value-added precipitation information to improve short-term weather forecasts of Baltic Sea Region countries.



## What is the innovation of baltrad?

BALTRAD is an initiative driven mainly by the national weather and hydrological services of the Baltic Sea Region. It builds on existing know-how and infrastructure. The innovation lies in the development of an ICT-network architecture which allows real-time data exchange and processing of weather radar data using common methods according to local needs in each country.

The new network is the world's most advanced international weather radar network. It will increase current network coverage and quality of information using advanced methods.

BALTRAD aims to set the standard for future networking of weather radar data in Europe, while also supporting smaller-scale municipal applications such as urban water management.



## How can you benefit?

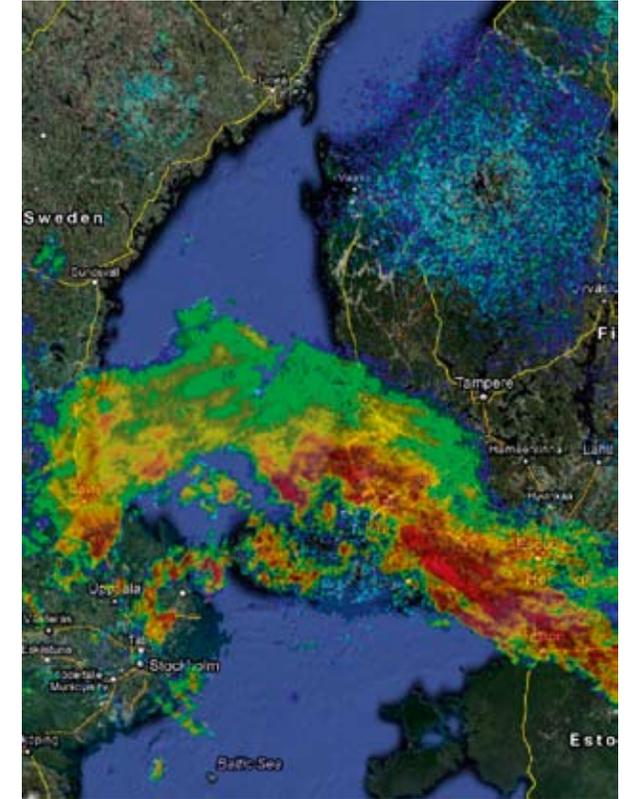
Real-time tool supporting weather forecasting and decision-making processes.

BALTRAD offers customized tools to integrate the real-time weather forecasts to improve decision making systems and processes.

Main sectors which can benefit from applying BALTRAD services are:

- Flash flooding, storm water and urban hydrology
- Road and railway management, control and protection
- Local rescue services
- Management of airports and air-traffic control
- Management of nuclear and chemical accidents
- Hydropower industry
- Agriculture.

BALTRAD develops pilot applications for some of these areas to demonstrate added value for end users.



Detail of the BALTRAD network, showing a precipitation system as it passes over the Baltic Sea Region

## What do you know about weather radar?

Weather radars detect raindrops, snowflakes and hail, with high resolution in both time and space, so radar helps to see where precipitation occurs and its intensity. Heavier rain gives stronger echoes which are represented by different colours on the screen.

A network of several radars is needed to cover larger areas. Data from neighbouring countries, obtained through international exchange, improves coverage especially over seas and across borders.

There is a 20-year tradition of data exchange among Nordic countries, and now in BALTRAD the network coverage of the Baltic Sea area will increase compared to existing services.