WWW TECHNICAL PROGRESS REPORT ON THE GLOBAL DATA-PROCESSING AND FORECASTING SYSTEM (GDPFS), AND THE ANNUAL NUMERICAL WEATHER PREDICTION (NWP) PROGRESS REPORT FOR THE YEAR 2005

LATVIAN ENVIRONMENT, GEOLOGY AND METEOROLOGY AGENCY

LATVIA

Centre: **UMRR** Riga

1. Summary of highlights

In August, an Alice-SC™ station was installed for reception and processing of the imagery transmitted from NOAA satellites in HRPT (High Resolution Picture Transmission) format at frequency 1.7 GHz.
In October, were replaced servers IMS (Integrate Meteorological System) for national observations on new servers Acer Altos G520.
During November was installed new the Meteorological Telecommunication System "TRANSMET" from METEO FRANCE INTERNATIONAL.

2. Equipment in use at the Centre

TRANSMET - Messages Switch System for GTS. 2 servers HP ML 370 G4 XEON 3.2GHz and supervision PC.
IMS - Integrate Meteorological System for national observations. 2 servers Acer Altos G520 XEON 2.8GHz.
PSS - Product Support System for the SMHI/HIRLAM data products. VMS MicroVAX 3400 workstation.
DWDSAT- Satellite Receiving System for DWD data and products. P4 2.6GHz.
RETIM 2000 - Satellite Receiving System for the raw data and aviation products with the WEDIS workstation for visualization. P4 2.3 GHz.
MEOS MSG - XRUS - Satellite Receiving System for MSG data and products. 2 servers P4 3.2GHz. (have not been operational since the installation in December, 2004)
Alice-SC™ - station for reception and processing of the imagery transmitted from NOAA satellites in HRPT. P4 3.2GHz.

3. Data and products from GTS in use

The daily statistic raw information:

7SYNOP:	00/06/12/18	UTC	2200
	03/09/15/21	UTC	1100
TEMP:	00/12	UTC	75
	06/18	UTC	30

The daily statistic of products:

GRIB (EGRR):	00	UTC	750
	12	UTC	500
FAX (EDZW):	00/06/12/18	UTC	5
(RUMS):	00/06/12/18	UTC	19

4. Data input system

Automated.

5. Quality control system

Format and basic consistency are checked.

6. Monitoring of observing system

Surface and Upper Air observations are monitored in real time at national level.

7. Forecasting system

There is no national NWP model in Latvia.

The following information is used for short-range and medium range forecasts :

1) DWD GME model products (from up to 168h twice per day and up to 48h once per day) and LME model products (up to 72h ahead twice per day) in accordance with the Product-Catalogue DWDSAT.
2) Exeter NWP GRIB products from the Global atmospheric model (up to 144h ahead twice per day) and from the Regional model (up to 36h ahead four times per day) in accordance with the Exeter NWP GRIB Products Guide.
3) NWP model T85L31 products from the Hydrometeorological Centre of Russia (up to 48h ahead twice per day) in accordance with an agreement between Latvian Environment, Geology and Meteorology Agency (LEGMA) and the Russian Federal Service for Hydrometeorology and Environmental Monitoring (Roshydromet).
4) Limited number of products from ECMWF (up to 168h ahead twice per day).

Specialized forecasts (sea waves, sea temperature, and sea ice for the Central Baltic and the Gulf of Riga) are based on the information listed above.

Extended range forecast for Latvia for a month is based on Hydrodynamic – statistical forecast from Roshydromet in accordance with the agreement between LEGMA and Roshydromet.

8. Verification of prognostic products

N/A.

9. Plans for the future

To continued in year 2006 the installation a Doppler Weather Radar METEOR500C and join the Nordic Weather Radar network.
Migration from Frame Relay to MPLS.
Migration to TDCF is in sight.