



New Forecasting Structure at DWD

**15th meeting of the Working Group on Co-operation
between European Forecasters (WGCEF)**

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Content

- The principle: The current three-level warning system of DWD
- Development of an automated warning process
- Central forecast production and National Warning Center
- Decentralised advisory service
- National warning center – 6 Advisory service bureaus
- Production of basic forecasts – Guidance – Warnings
- Working hours at the National Warning Center 24/7 – Regional advisory center 05.300-22.00/24.00
- Structure of workforce: NWC – Forecasters Class I / Class III,
RAS – Forecasters Class II / Class III

The principle: Three-level warning system of DWD

Level 1 – Early Warning Level:

Based on the results of numerical weather models (incl. EPS) for the coming 2 to 7 days

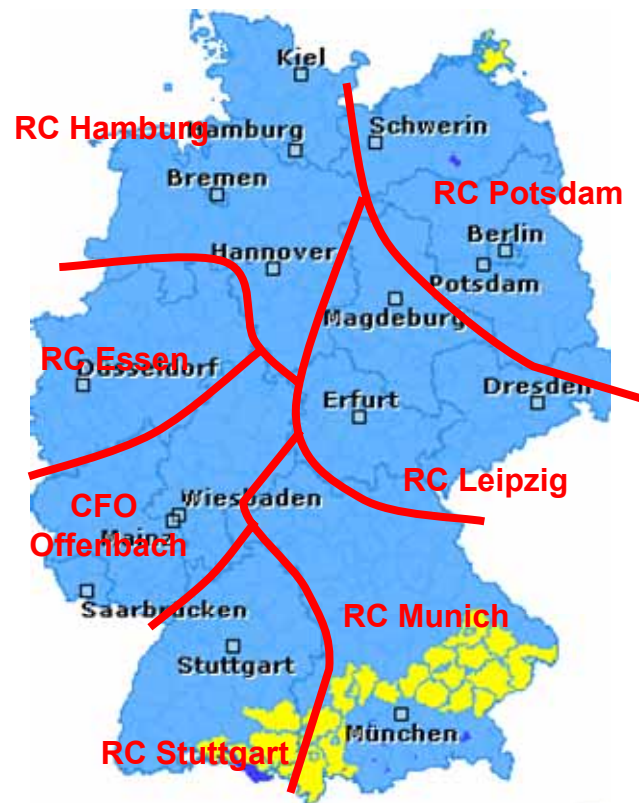
Level 2 – Prewarning Level:

Based on numerical forecasts and follow-up statistical procedures for the coming 12 to 48 hours

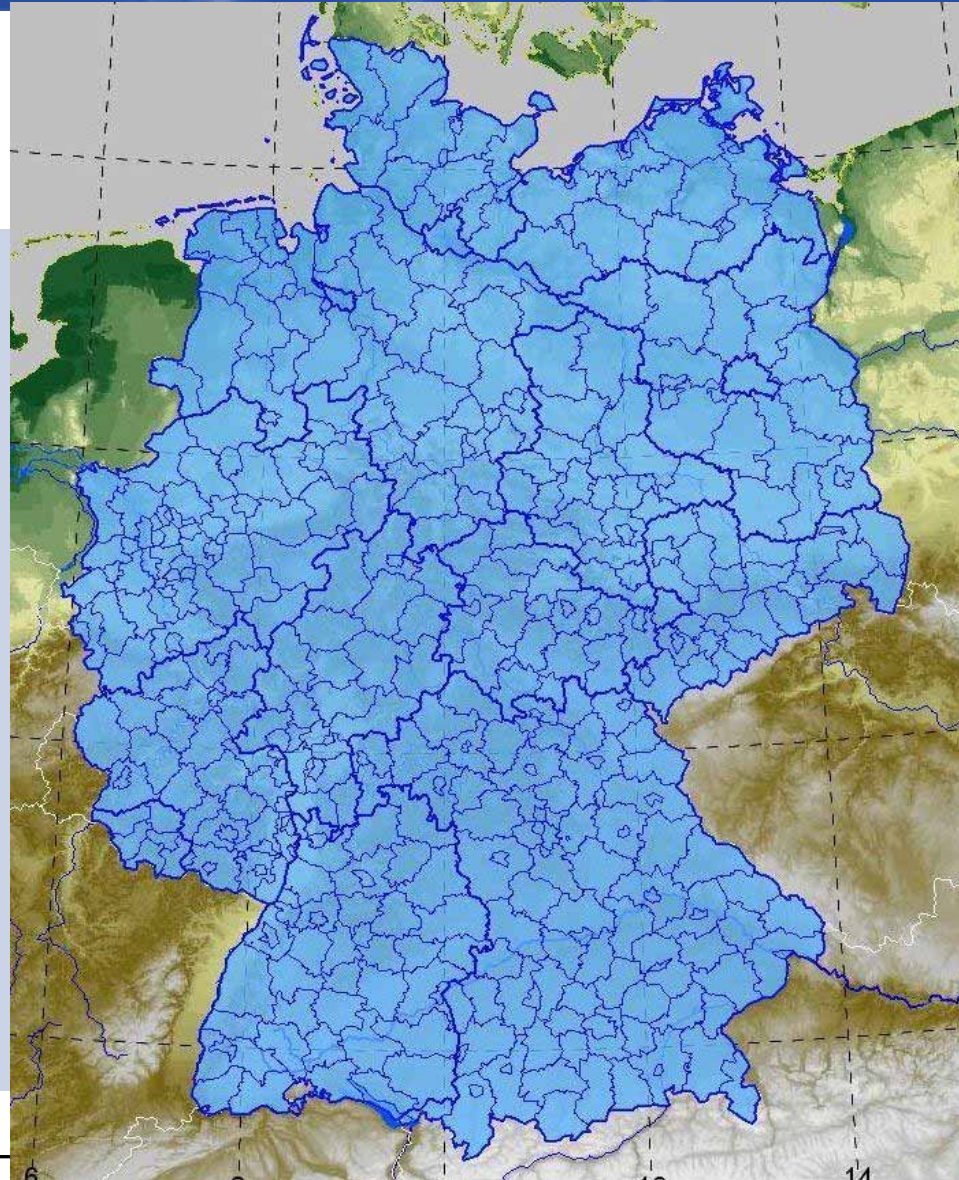
Level 3 – Warning management system, small district related:

Based local models, nowcasting technics, observation for the coming maximally 12 hours

Today: 7 Regional Warning Areas

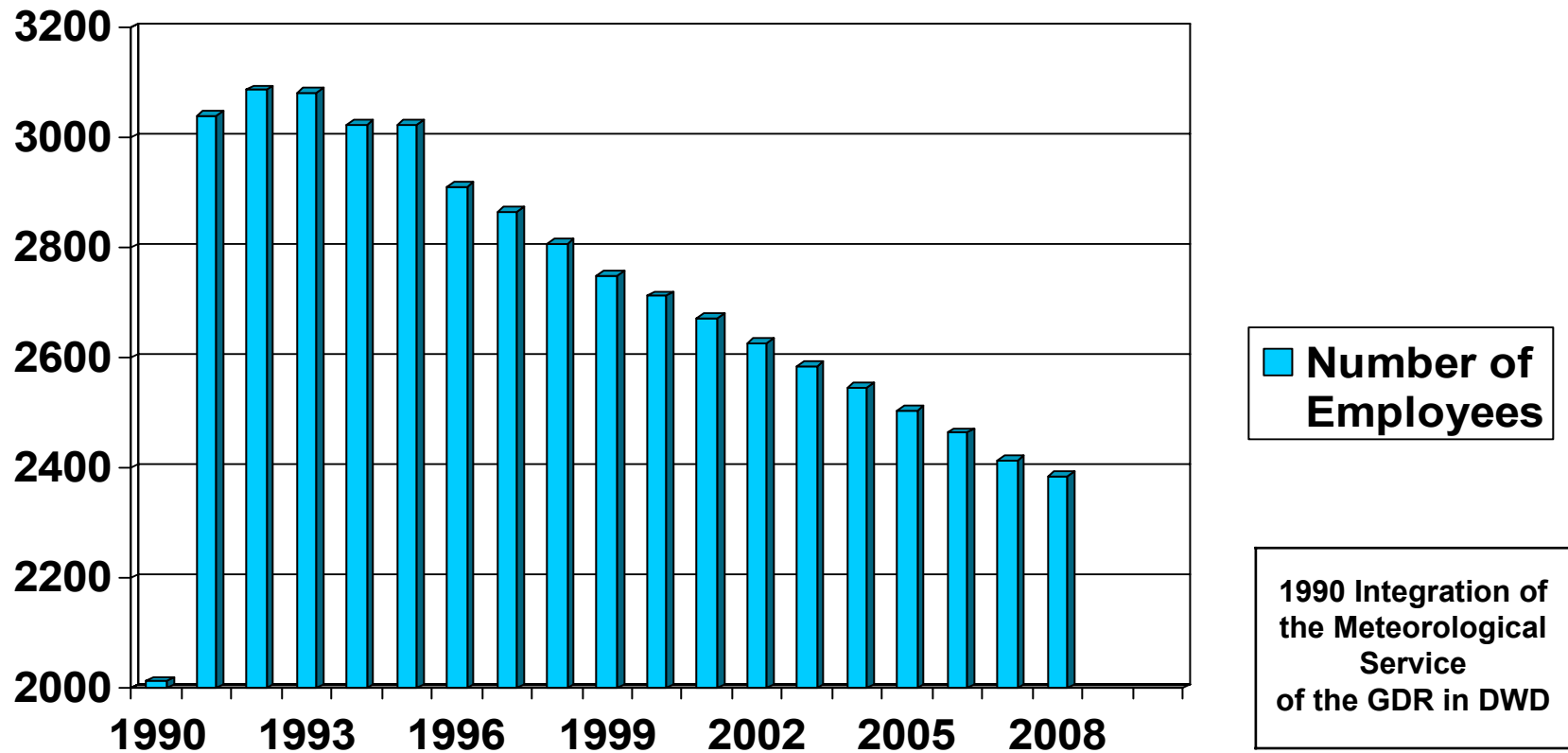


Deutscher Wetterdienst



~350 Warning
Districts

Number of established posts 1990 – 2008 at DWD





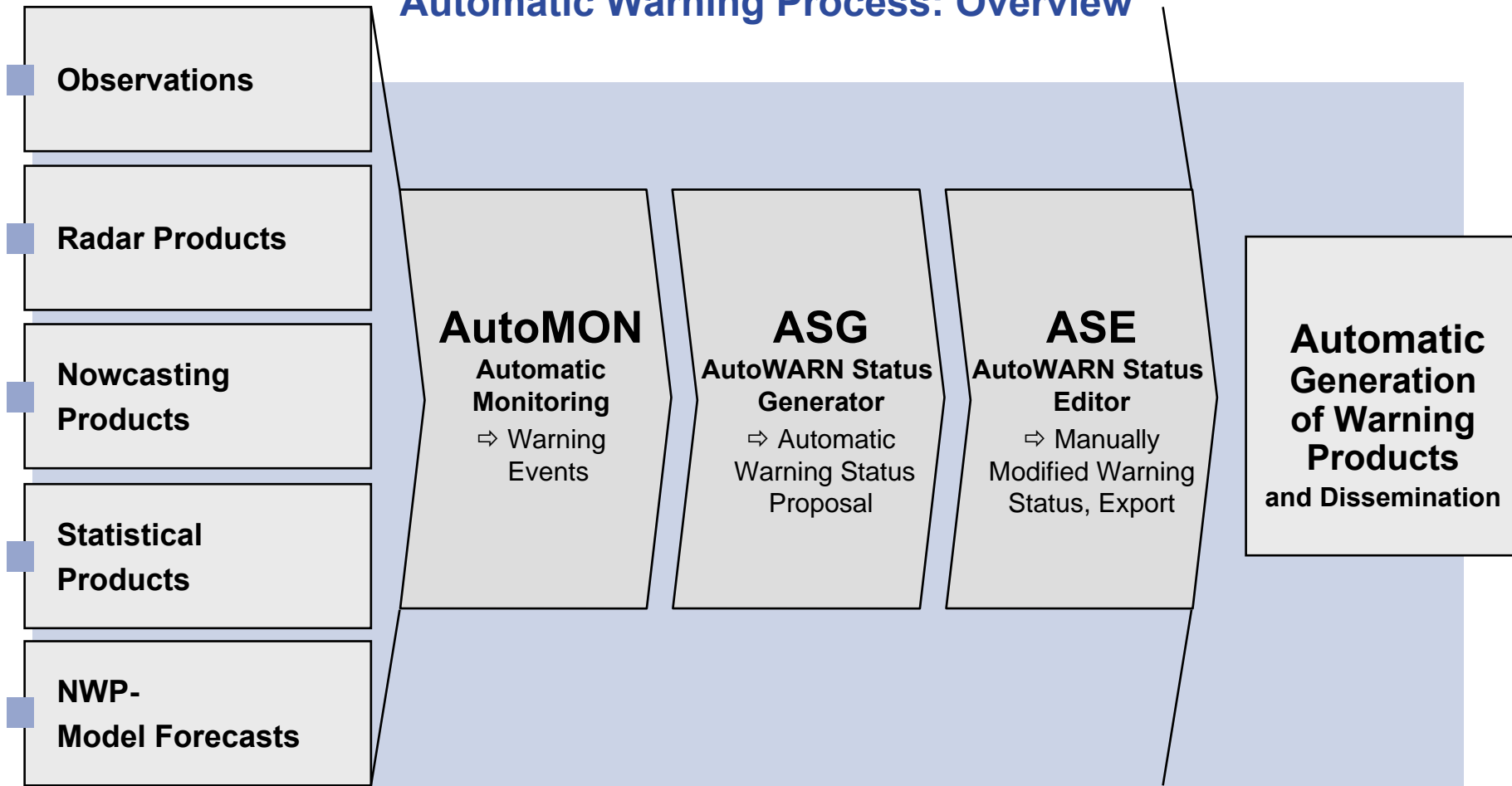
Development of an automated warning process:

- Forecasting meteorologists need assistance because of a rapidly growing amount of meteorological information
- Improvement of the quality of DWD's weather forecasting and warning services
- Requirements in terms of spatial and temporal resolution of forecasts and warning are growing.
- Human resources are decreasing
- DWD is developing the AutoWARN system which automatically merges and processes all available meteorological information.



AutoWarn: Expertsystem using every numerical and observed information for generating warningproposals automatically

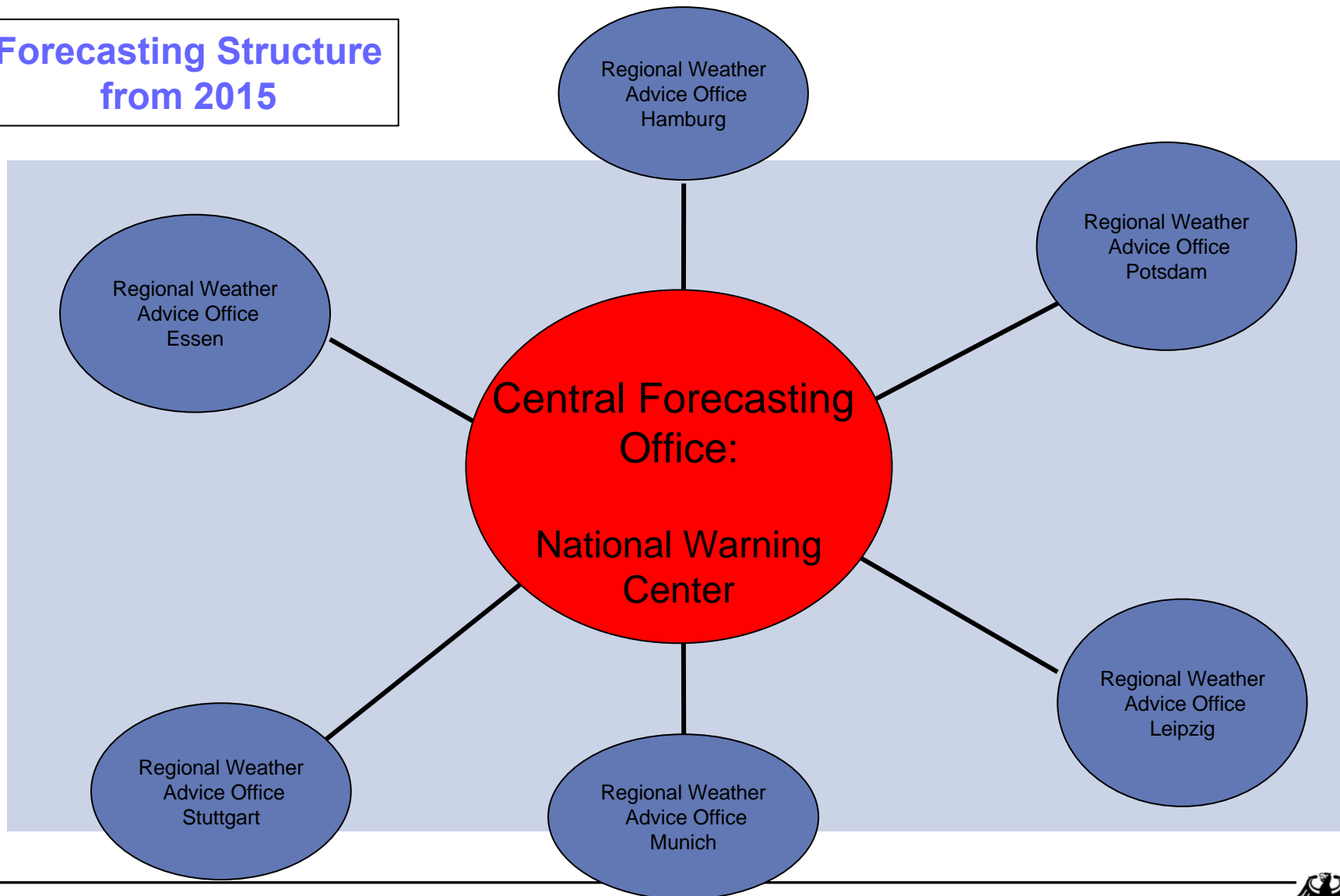
Automatic Warning Process: Overview



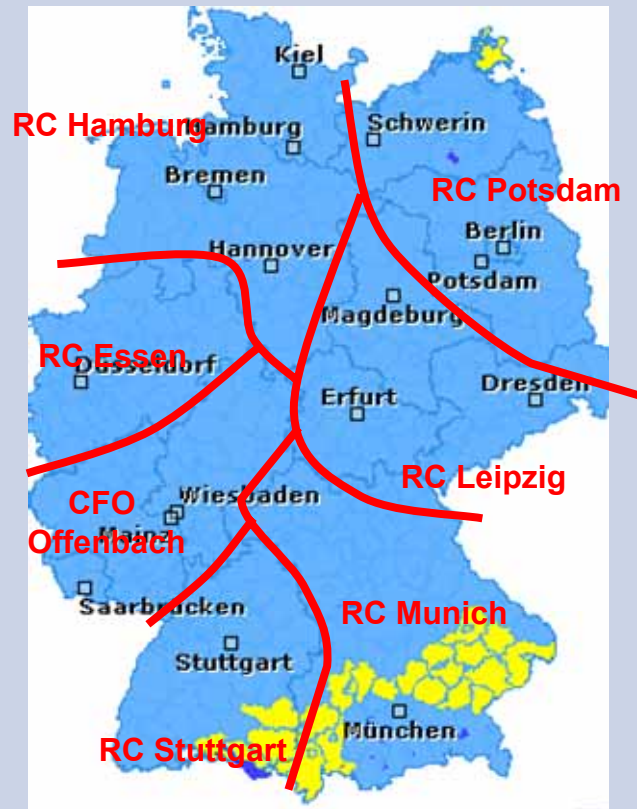
Future Forecasting Structure at DWD from 2015

- **Central forecast production and
National Warning Center**
- **Decentralised advisory service**

Forecasting Structure from 2015



Current Structure: 7 Regional Warning Areas



New Structure: *Proposed Warning Areas North - South*



— Possible
Version I

- - - Possible
Version II

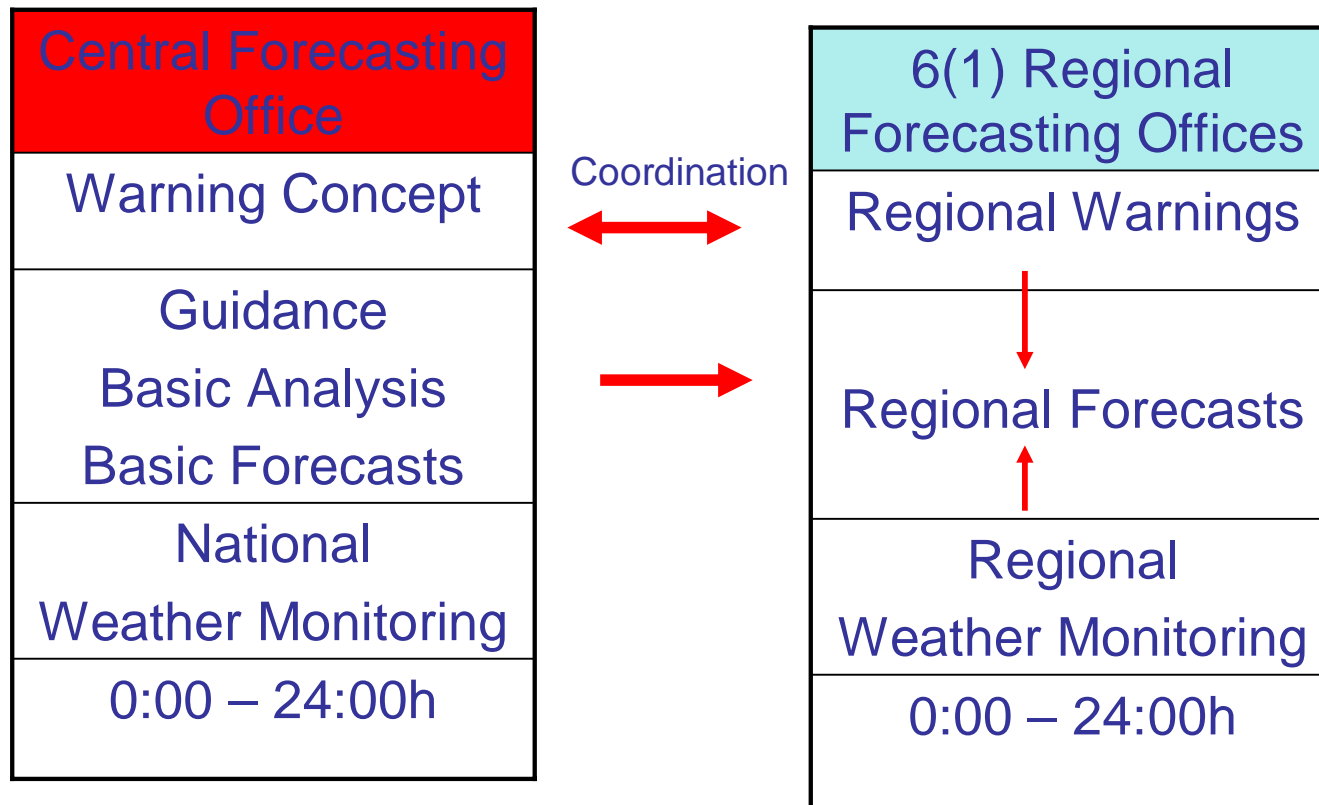


Duties of Central Forecasting Office:

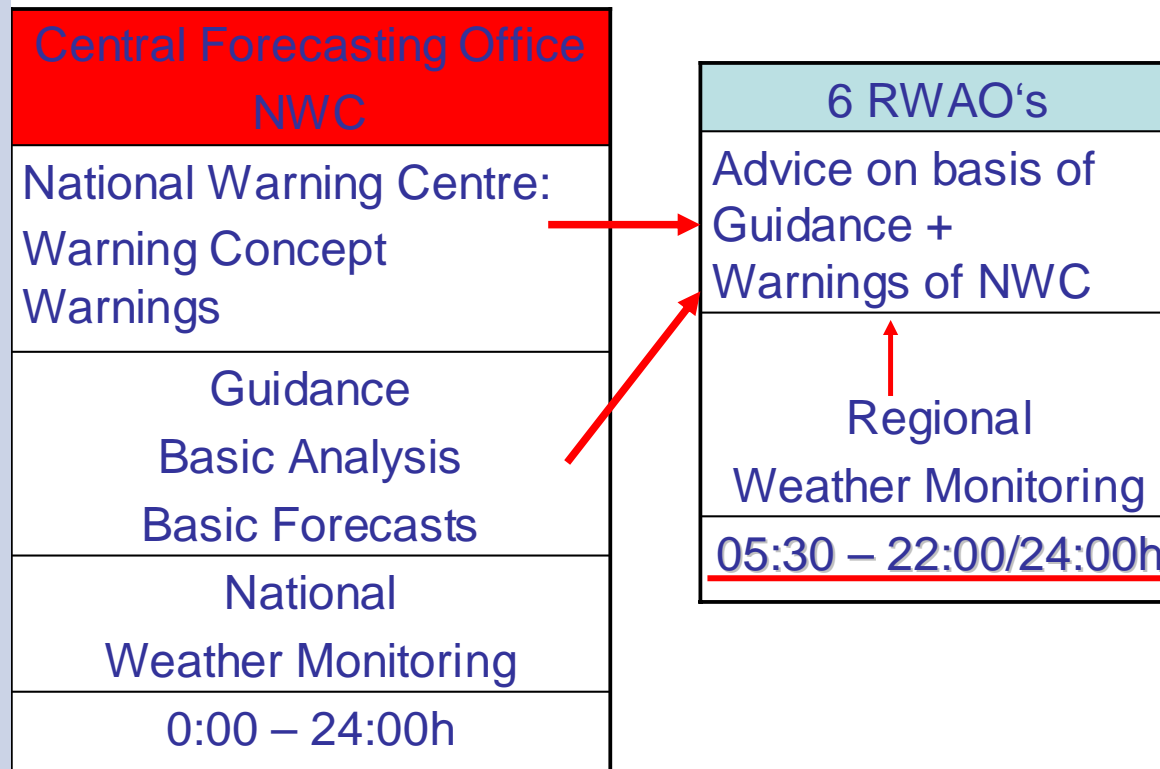
- Production of basic forecasts**
- Guidance**
- Warnings**
- Single Voice Policy**



Current Structure

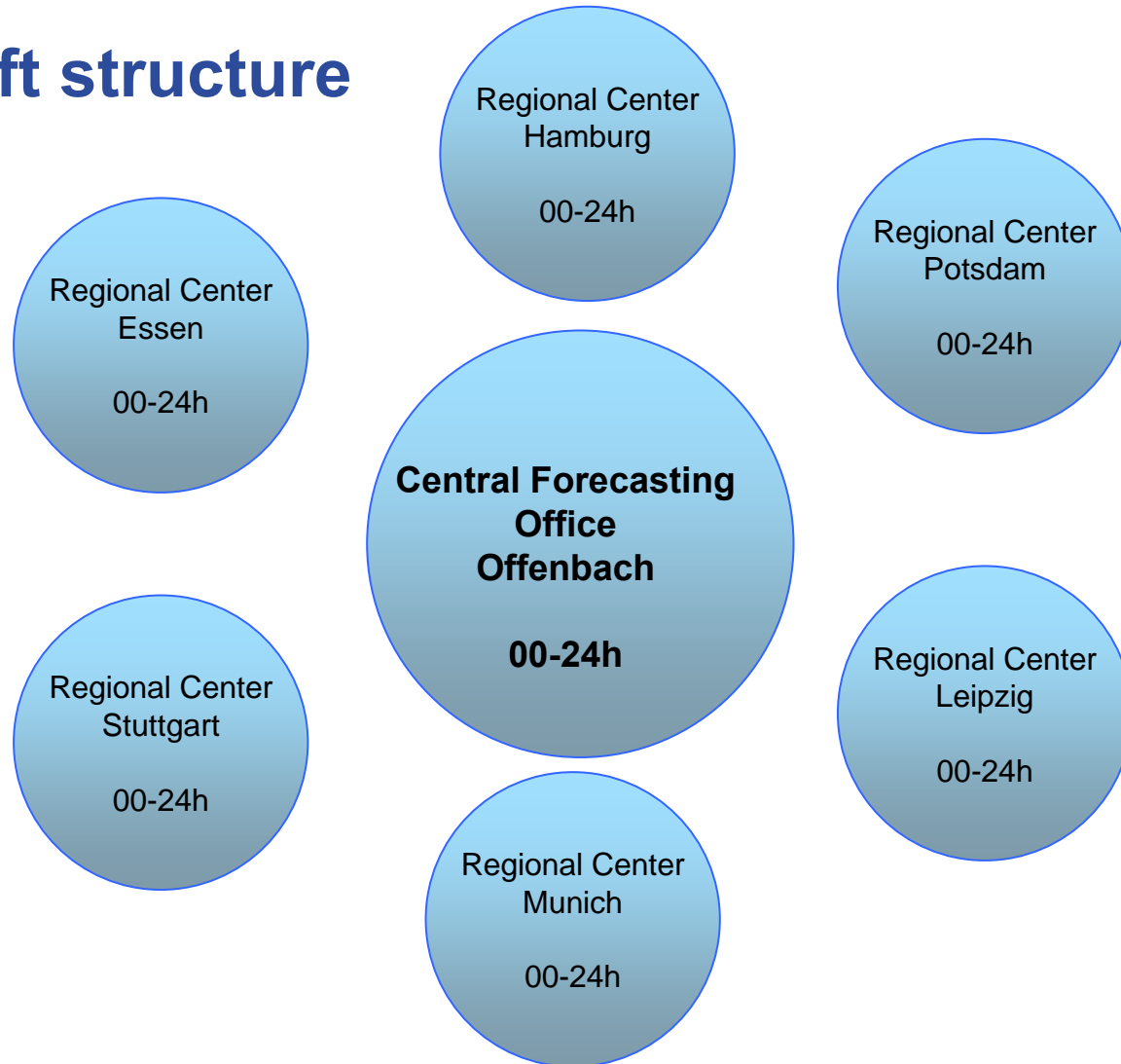


Future Structure



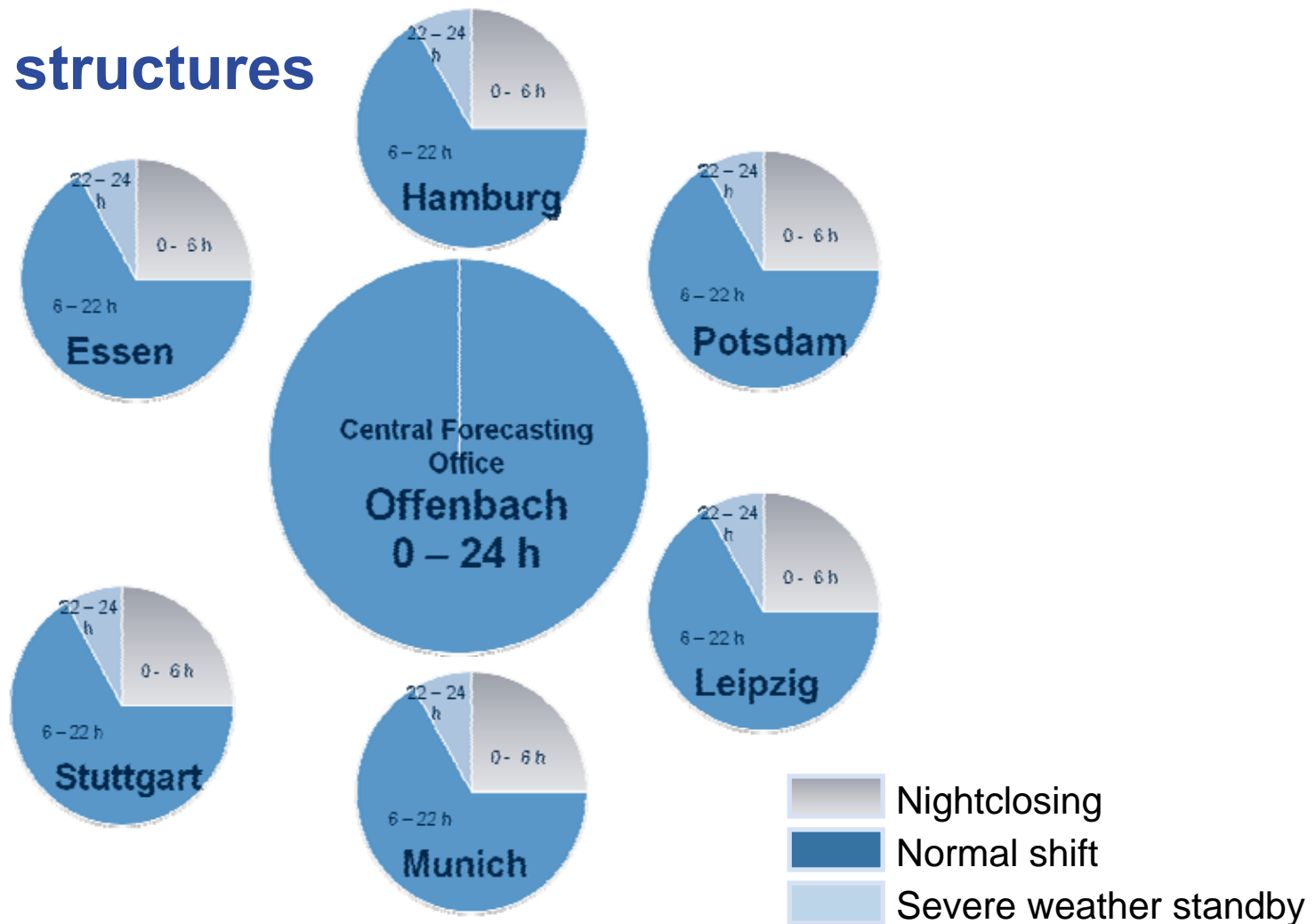


Current Shift structure





New shift structures



Labour Force

Today



Tomorrow

Labour Force Balance: Overview

Today



Tomorrow

	6 Regional Forecast Offices	6 Regional Weather Advice Offices
Class I Meteorologist (higher civil service)	48	6
Class II Meteorologist (higher intermediate civil service)	6	30
Class III Meteorologist (intermediate civil service)	84	42
Σ	138	78



The End

