

# Commercialisation

Lessons learned from Dutch weather market



# Where information comes together...

weather

traffic

public  
transport

Weather, traffic and public transport. Daily actual information that influences our lives.

Clear information for consumers and companies.

...where informative comes together

[weerplaza.nl](http://weerplaza.nl)   
Het weer op *jouw* locatie

[verkeerplaza](http://verkeerplaza.nl)   
Het verkeer op *jouw* locatie

[ovplaza.nl](http://ovplaza.nl)   
Het OV van *jouw* reis



# The team...

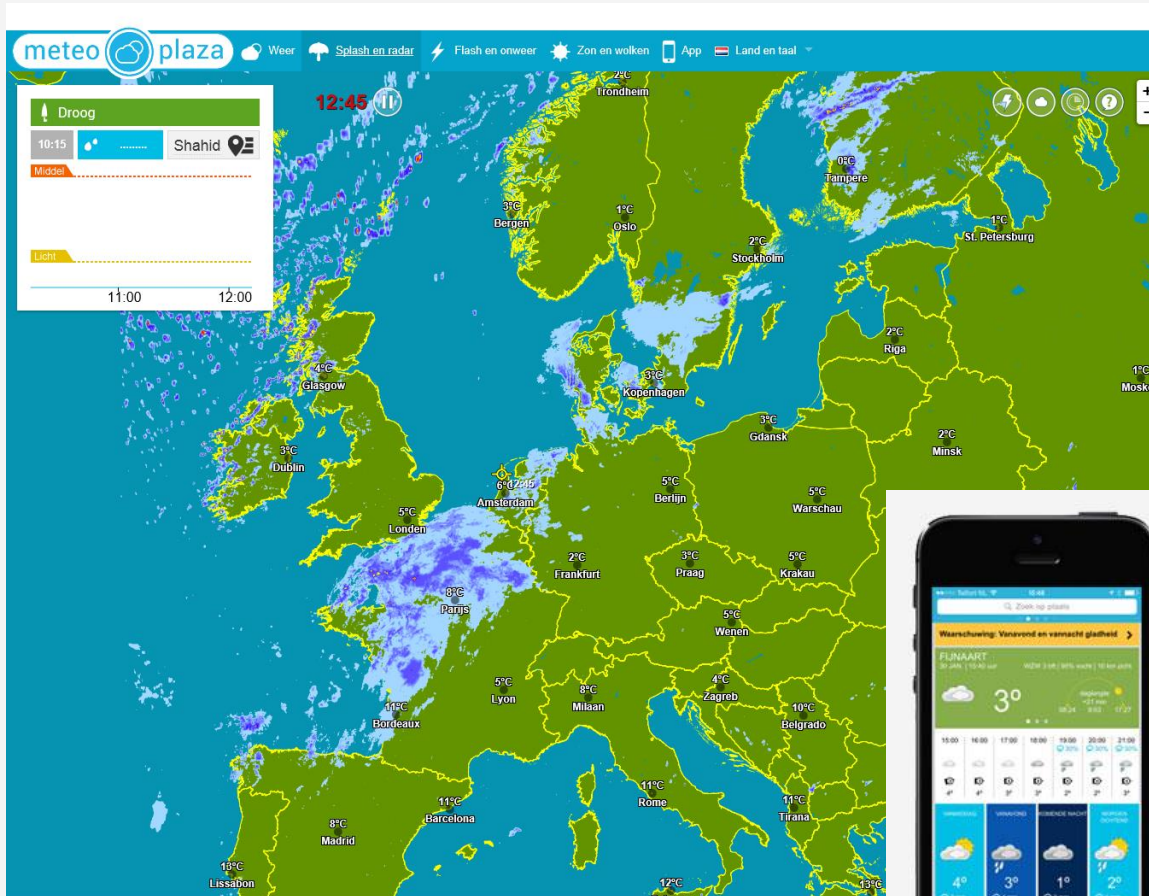


# History

- 1996: employed with KNMI
- 1998: separation of the commercial department of KNMI branch office Weathernews
- 2003: management Weathernews Benelux BV
- 2008: foundation Infoplaza BV
- 2009: weather-platform BtoB market and media
- 2010: launch of consumer brands
- 2012: launch of first mobile Apps
- 2014: further expansion consumer activities in Europe



# Consumer activities



The smartphone displays a train planner interface for the route 'Lage Zwaluwe -> Amsterdam Centraal'. The interface shows estimated departure and arrival times, the number of transfers, and a list of stations along the route.

Station	Vertrektijd	Spoor
Lage Zwaluwe	16:10	2
Sprenter		
Dordrecht Zuid	16:18	
Dordrecht	16:23	
Zwijndrecht	16:26	
Barendrecht	16:32	
Rotterdam Lombard...	16:35	
Rotterdam Zuid	16:38	



# Business to business markets



# Collaboration National Weather Services and private market



# Dutch market situation '80 – '90

- The first private weather company in the Netherlands was founded in the late eighties.
- The Netherlands was one of the first countries that realised that the industry would become stronger if there would be a healthy basis for collaboration between the government and the private sector.
- In ECOMET KNMI was also the first mover in free data policy.
- This has led to a strong development of the weather market:

**'98**

- 1 private weather company
- Total market revenue 6 Mio Euro
- No free information for consumers

**Today (15 years later)**

- 15 – 20 private weather companies
- Total market revenue 30 Mio Euro
- Every consumer its own weather forecast





# Situation at KNMI in 1998

- KNMI, founded in 1854, is an agency of the Dutch Ministry of Infrastructure & Environment
- A long and rich history in weather forecasts for the general public; in 1951 it was one of the first Met Services in the world with a weather forecast on TV.
- In 1998 it had an total annual budget of about 45 million euro. Incomes:
  - Research and government contribution      € 32 Mio
  - Aviation      € 10 Mio
  - Commercial Activities      € 3 Mio
- In 1999 KNMI decided to separate the commercial weather activities to further develop it with an international private company
  - Media (TV, newspapers and Radio)
  - Maritime sector
  - All land based services like Agriculture, Construction, Energy, Road Icing, etc.



# Effect of commercialisation in the Netherlands

- The weather market was still in it's childhood
  - About 10% of KNMI's staff moved to a new private company
  - Taking over about € 3 Mio in revenue
  - At that point of time the company was hardly profitable
- Development since then
  - In partnership with Weathernews Inc the commercial revenue doubled
  - Because of the transparent collaboration between KNMI and the market the total market revenue has grown from 6 to 30 Mio euro in 15 years
  - The number of private companies grew to 5-6 significant players, 10-15 smaller companies and a dozen successful weather apps
  - 3 Dutch players have developed into international players with branch offices in several European countries
  - Weather is in reach of every consumer and company and the number of innovative weather solutions is increasing day by day



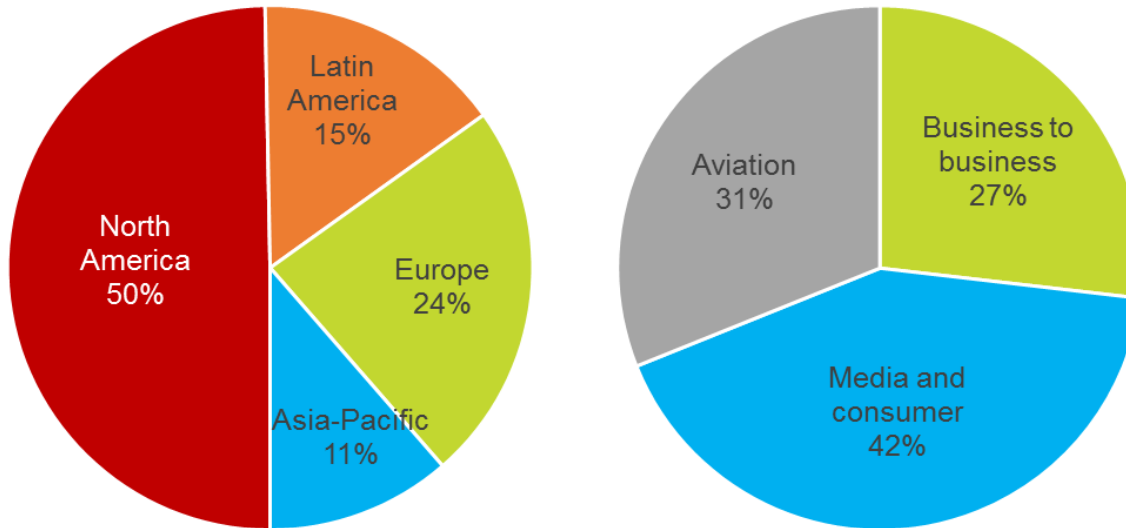
# Today's core focus of KNMI

- Scientific research in the field of weather, climate and seismology
- The infrastructure of the Dutch observation network
- Representative for the Netherlands in international meteorological organizations, even representing the interests of the private sector
- Local responsibilities for public order and safety
  - Services for governmental bodies to support their tasks in the field of public order and safety
  - Weather forecasts and warnings for the general public
  - Weather forecasting for Dutch Aviation Authorities



# European commercial weather market

- The global market size of the forecasting industry is estimated at \$ 2 billion



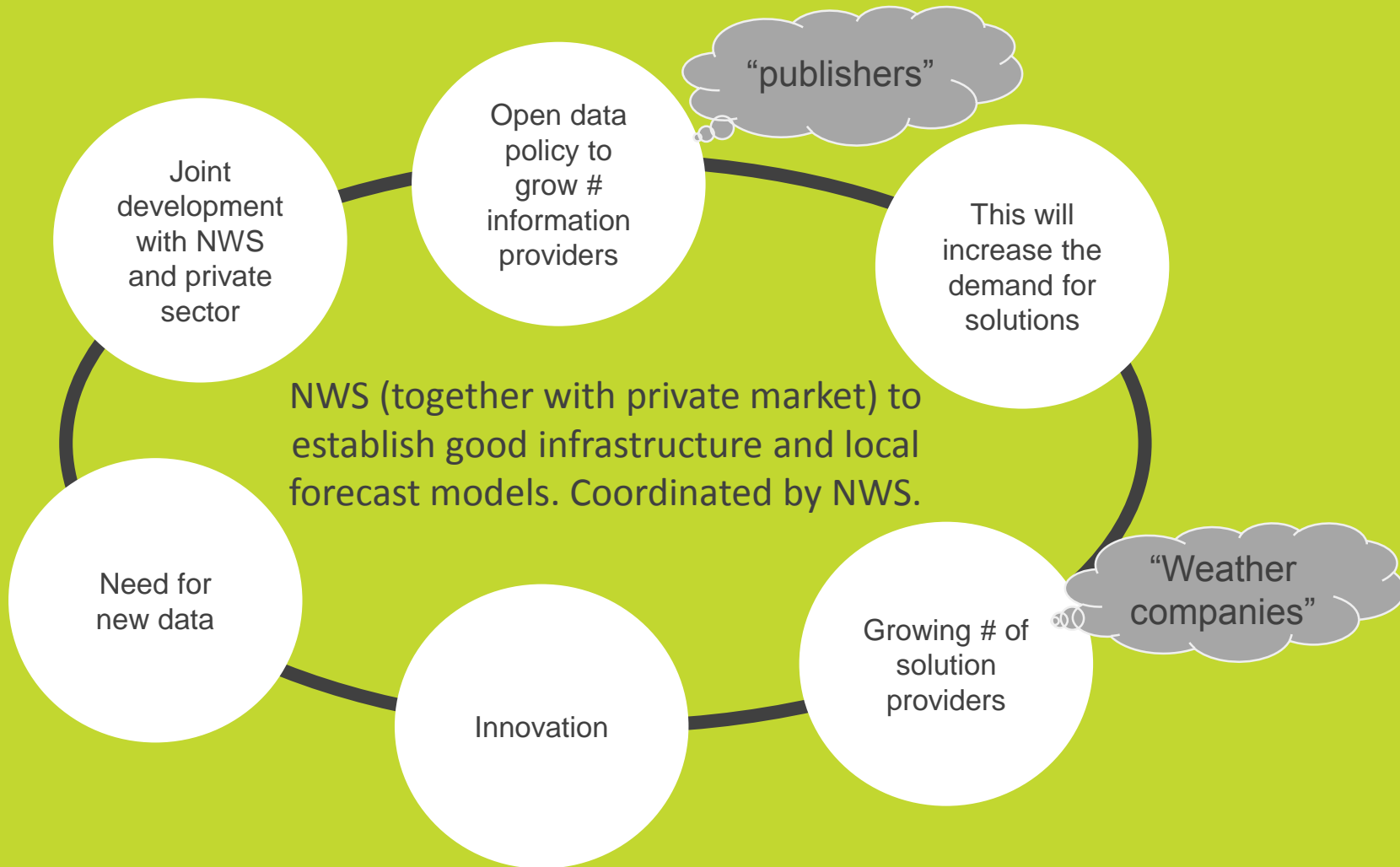
- With a comparable GDP, the weather market in North America is 2 times bigger than the European market
- With 4,7% of the European GDP, the Dutch weather market would be estimated at \$ 14,5 Mio. In fact it is about \$ 30 - 35 Mio.
- It exists out of 50% Business to Business instead of the 27% worldwide...

# Lessons learned from this Dutch example

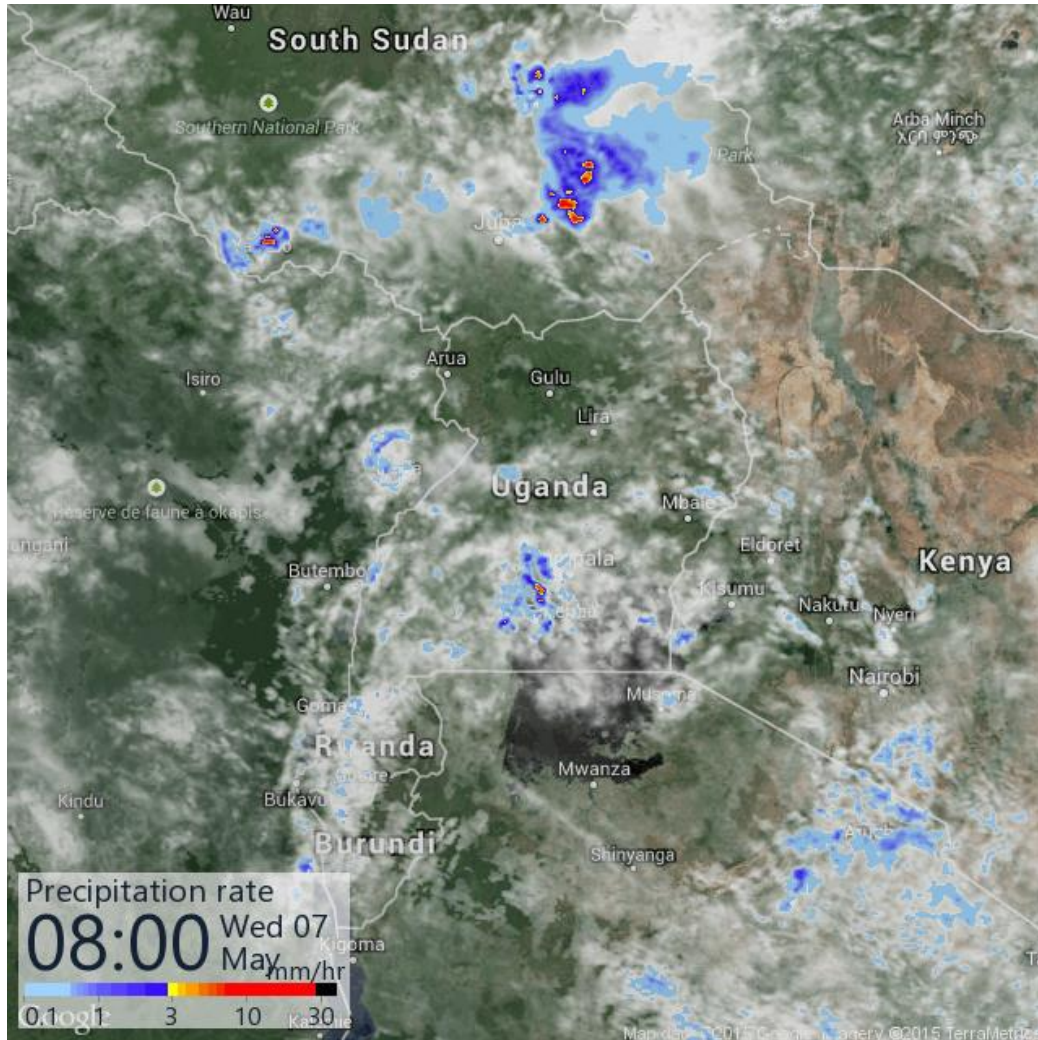
- KNMI's role in the weather industry became much more clear by dividing public and private services
- KNMI has still the central role (authority) in meteorology in the Netherlands
- Over years there has been a growing collaboration between KNMI and private companies
- Thanks to partnering between KNMI and the private weather industry the market size has grown rapidly (faster in comparison to other European countries)
- Many commercial (front-end) services we see in Europe come from innovation of Dutch companies
- END conclusion: National Met Services are best in fundamental research and local development; the private sector can help to accelerate operational forecasting and services



# How can NWS's and private companies collaborate to accelerate developments?



# Example collaboration NWS and private market



## Meteostat Second Generation

- KNMI's goal: generate high resolution climatological statistics for precipitation
- The development of operational (5 minutes) images of precipitation is not KNMI goal, but more or less a derived product
- This was one of the reason why we were able to develop this technique in close cooperation with KNMI
- This gives us a solution for all area's where qualitative radar information is not available

# How NWS can benefit from private sector

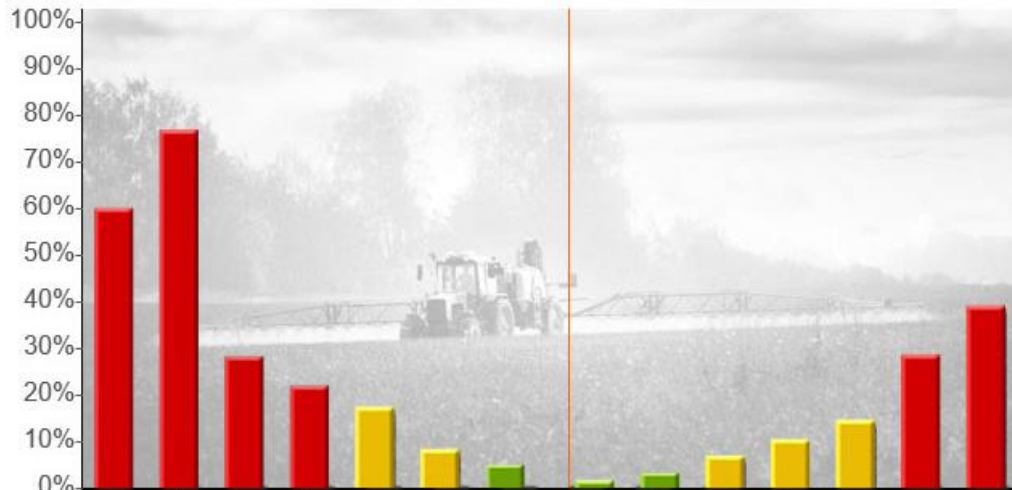
- African NWS's can benefit from know-how, experience and many products and services the private sector has developed in the last decades.
- We can help you develop the basic infrastructure from observation to collection and enrichment of all kind of data sets.
- The private sector can help develop a commercial organisation. What skills are needed?
  - To understand several markets needs
  - To translate meteorological information into customers solutions
  - To package 'big data' into simple and clear presentation
  - Run an operational company with sales, risk-communication and customer support



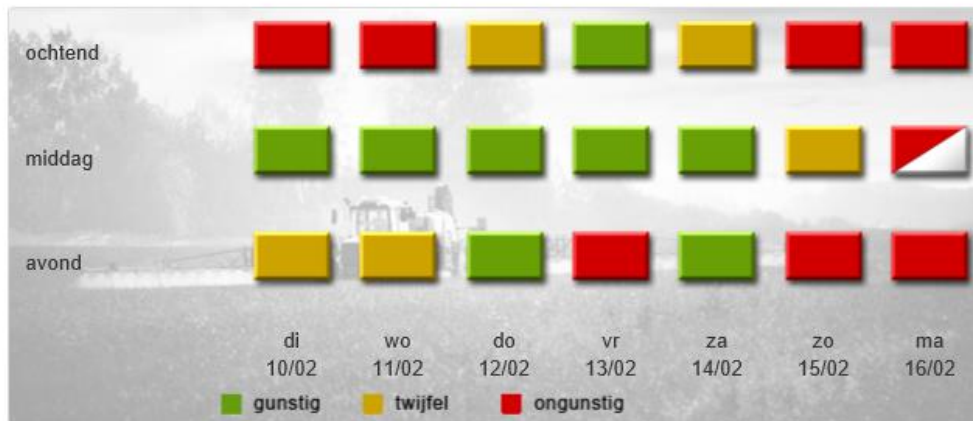


# An example of translating weather into a solution

Ziektedruk afgelopen week en volgende week



Schimmelbestrijding uitvoerbaar bij dit weertype?



A farmer is not interested in rain, humidity or wind. He wants to know what the effect is on the crops.

- We have developed disease pressure models for many crops.
- With a simple graph a farmer can easily see the risk for certain diseases in it's crops.
- With a red, orange, green coloured overview a farmer can find the best weather window to spray.

# Recent projects in Africa

## eLeaf

Crop status based on satellite information.  
Involved in agricultural projects in Ghana and Uganda.

## Royal Haskoning DHV

'Floods and droughts Disaster Risk and Early Warning System for Ghana.' We provide precipitation images and possibly an HR model for Ghana.

