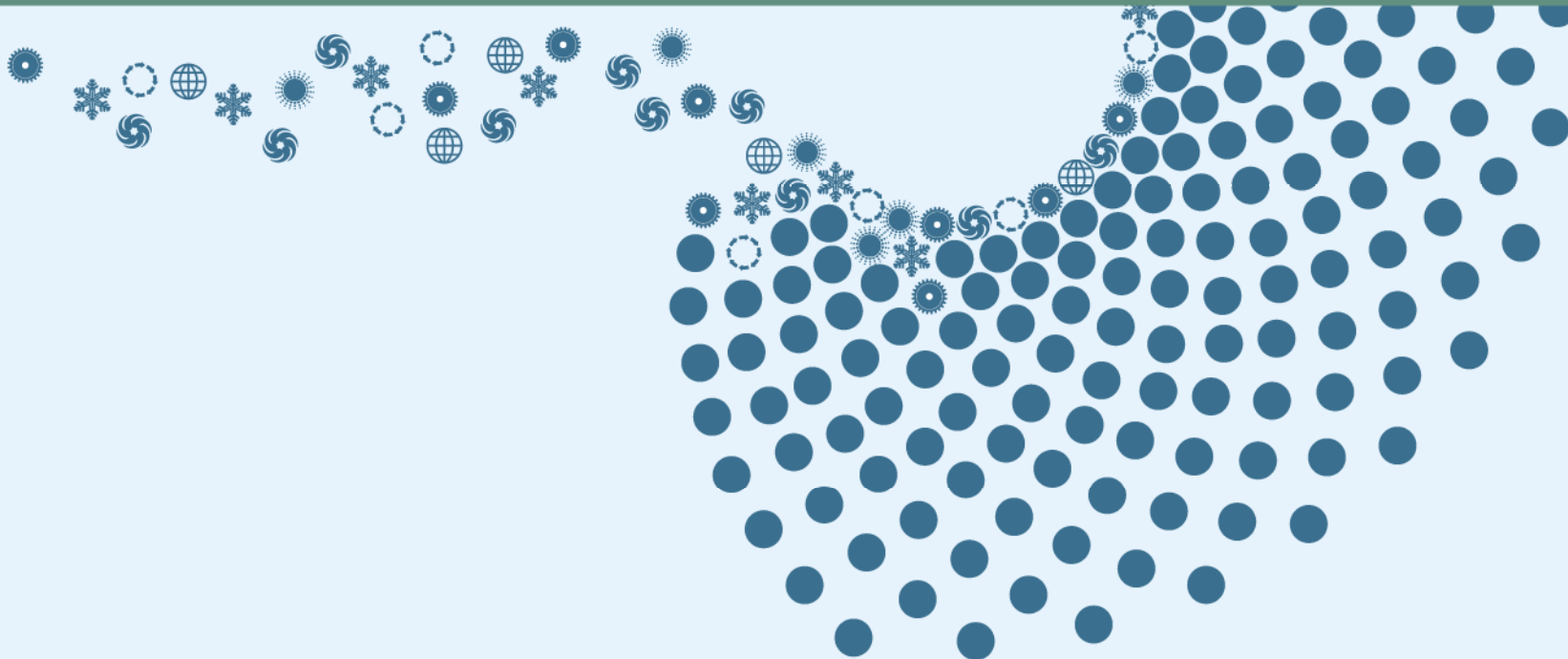


Good practice example

## Species Map and Species Observation Service of the Norwegian Biodiversity Information Centre (NBIC)



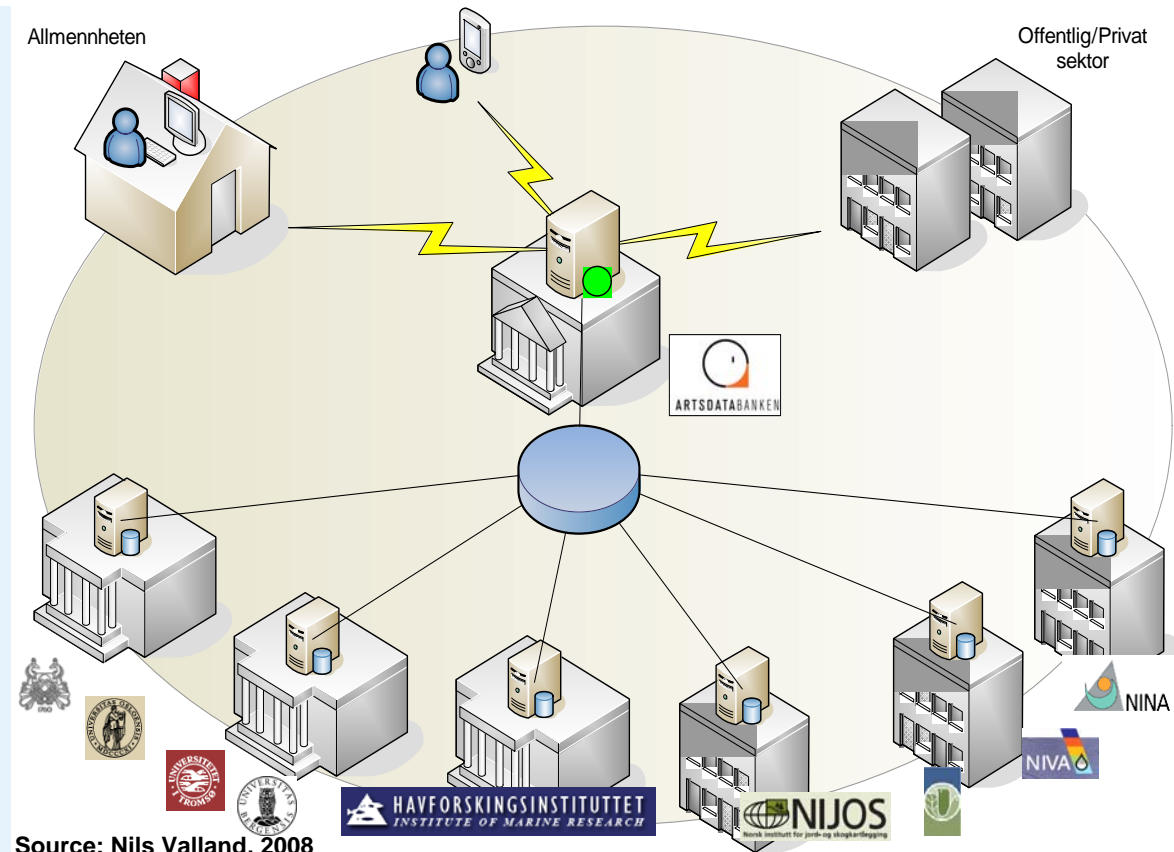


# Species Map and Species Observation Service

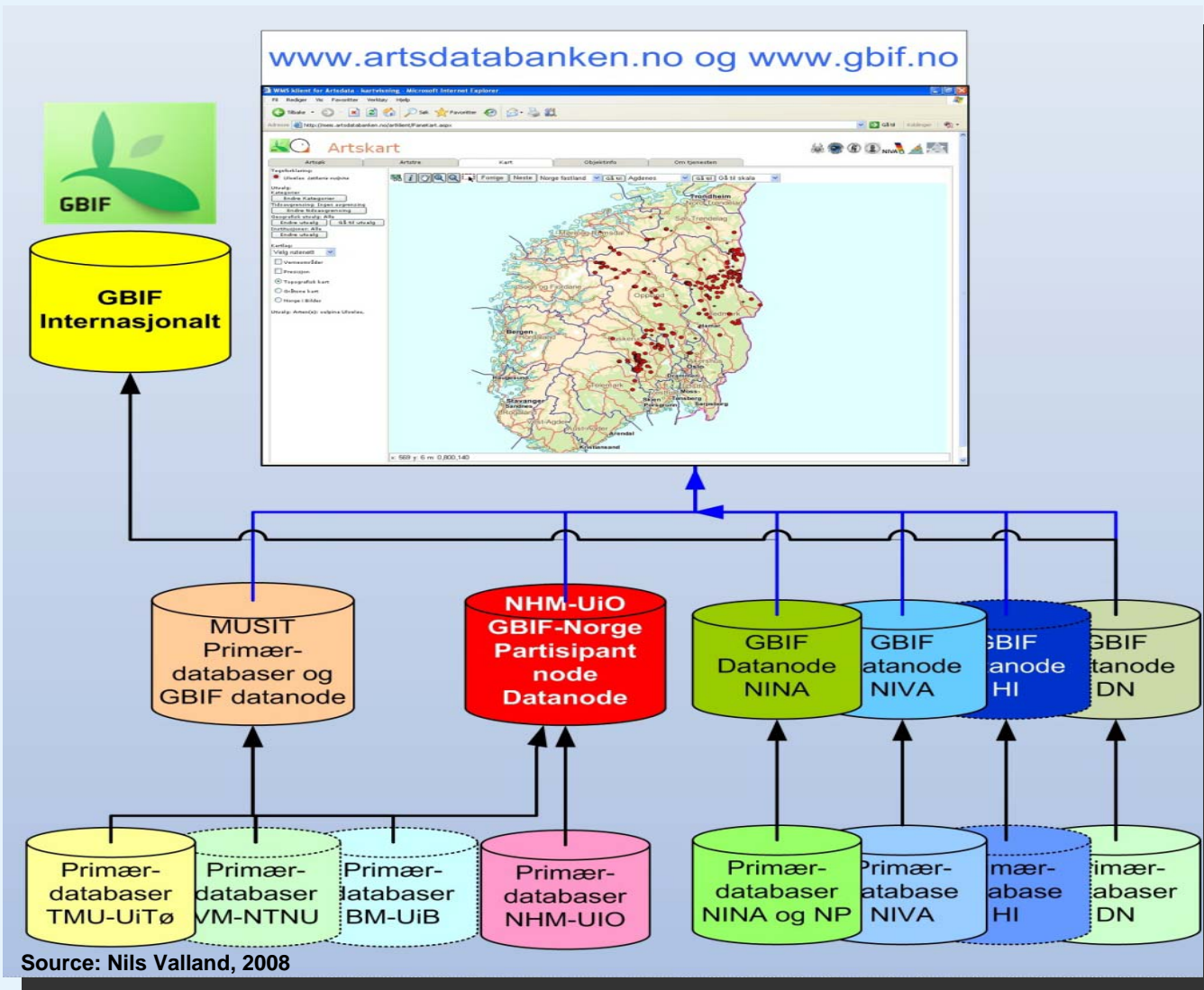
- **Type of initiative: Training and education**
- **Overall Implementation approach : Partnerships between administration and/or private sector and/or non-profit sector.**
- **Technology choice: Proprietary technology, Standards based technology, Accessibility compliant (minimum WAI AA), Open Source software.**
- **Funding source: Public funding national, Charity, voluntary contributions.**

# s ft: Basic Principles

- Dataowner manages his source data.
- Make available data in standardised form (Excel, statistics).
- Establish data webservice (wms, gml) for search, integration or download.



# Dataflow and roles



- Dataowner make a "copy" of primary databases codes with standardized dataparametres (Darwin Core 2 – norwegian edition)

- The copy is stored in a nodedatabase delivering data online to Species Map Service and GBIFs dataportal

- Norwegian Biodiversity Information Centre delivers species names og Redlist status to the nodedatabases

- Natural History Museum is the Norwegian GBIF participant node

- Background topographic maps is delivered as WMS from Norwegian Mapping Authority (Norway Digital), Norwegian Polar Institute and the Directorate for Nature Management



## Technology solution – Webmap client

- The map service application is built on the .Net-platform, Asp.Net 2.0. (Visual Basic and C#).
- The Index-database in the Norwegian Biodiversity Information Center Web services (C#) installed in the distributed source databases (Oracle, MS SQL, PostgreSQL, MySQL). These are running either on Microsoft or Linux-platform.

# sft: Webmap client

**Artskart**

Søk Artstre Kart Objektinfo Om tjenesten

Norge fastland Gå til Alvdal Gå til Gå til skala

**Velg symbolisering:**  
 Art  Kategori  Institusjon

**Tegnforklaring:**  
**Arter/artgrupper**  
 Krystallkrepss *Sida crystallina*  
 ikke koordinat - kun kommune  
 kun observasjon (mindre symbol)

**Utvalg:**  
**Kategorier:** Alle  
 Endre kategorier  
**Tidsavgrensing:** Ingen avgrensing  
 Endre tidsavgrensing  
**Geografisk utvalg:** Alle  
 Endre geografisk utvalg  
**Institusjoner:** Alle  
 Endre institusjoner

**Kartlag:**  
 Velg rutenett

Geografisk presisjon  
 Marker usikre og menneskespredte  
 Verneområder  
 Topografisk rasterkart  
 Topografisk kart  
 Gråtone kart  
 Norge i Bilder

**Nøkkelinformasjon** Lukk vindu  
 2 objekt(er)

	1	2
<b>Institusjon</b>	Norsk institutt for naturforskning	
<b>Samling</b>	VannInfo	
<b>Internr. nr.</b>	OVRIGE-100521	
<b>Vit. navn</b>	Sida crystallina	
<b>Norsk navn</b>	Krystallkrepss	
<b>Funndato</b>	0/0 0	
<b>Fylke</b>	sør-trøndelag	
<b>Kommune</b>	røros	
<b>Lokalitet</b>	feragshåen	
<b>Koordinat presisjon</b>	3	
<b>Antall</b>		
<b>Status</b>	LC	

[Vis mer detaljer for denne posten](#)  
[Zoom til denne posten i kartet](#)  
[Vis alle treff i listeform](#)

Tilrettelagt: Artsdatabanken og GBIF-Norge - 2008

# **s ft:** Impact

- **Increased public awareness regarding to the biodiversity issue at local, regional, national and international level.**
- **Increased public participation in species data collection, identification and reporting**
- **Increased number of observations of species, and therefore a better determination of its distribution pattern along the country and Scandinavia.**
- **Decision support to local decision makers.**
- **International data exchange regarding Biodiversity.**
- **Increased data interoperability among all stakeholders.**



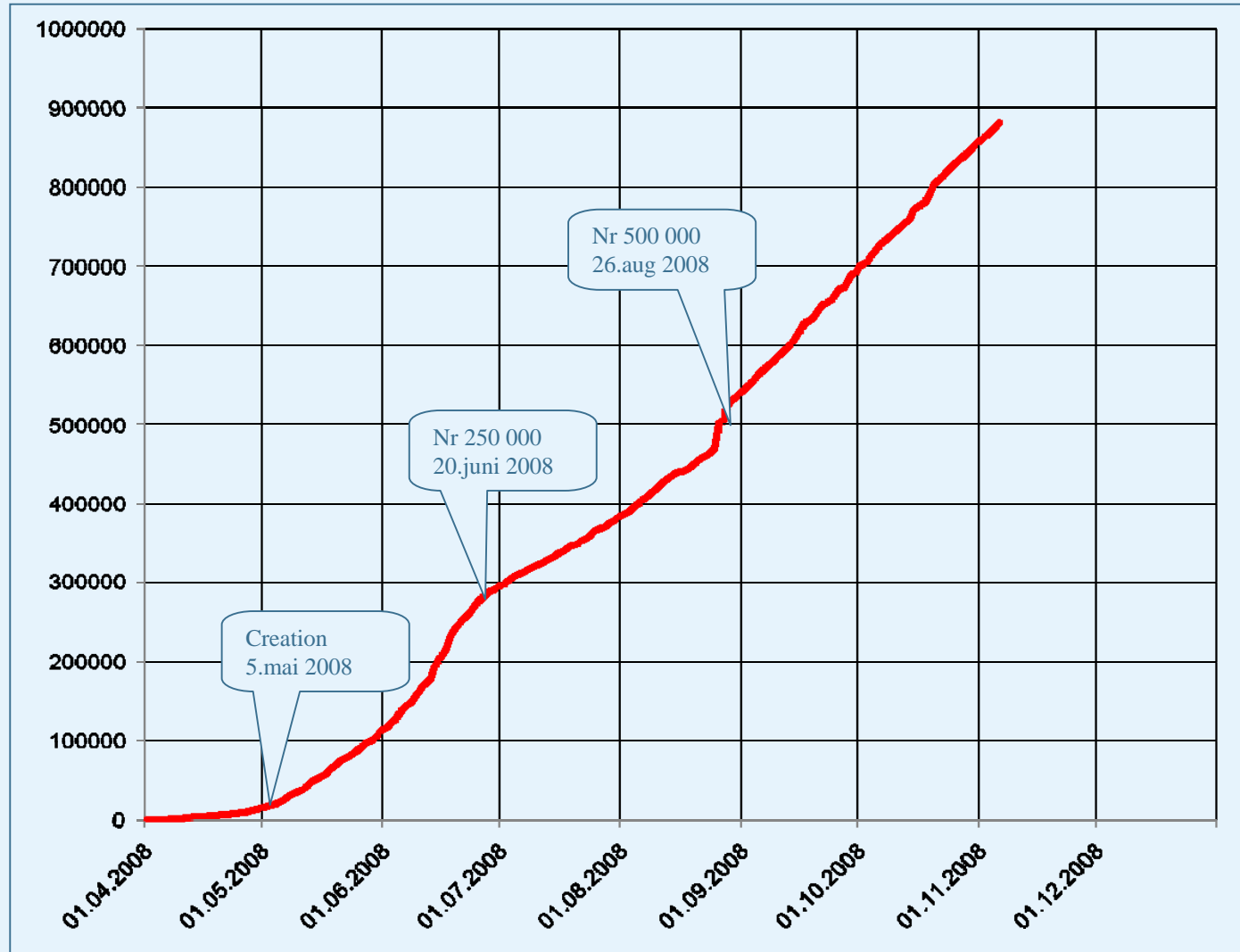


## Lessons learnt

- **Lesson 1 - Collaborative Synergy:** Through the implementation of this project (Artsdatabanken) a collaborative synergy effect among all stakeholders ( at national and international level) was achieved, thus reflecting positively in terms of numbers of species observed per month.
- **Lesson 2 - Growth in the number of observations:** The number of observed species per month has increased markedly from 250,000 in June, 2008 to 500,000 in November, 2008.
- **Lesson 3 - Increased public awareness and participation regarding Biodiversity in Scandinavia**



# Lesson learnt (Nr. observations)



Source: Nils Valland, 2008

# **s ft:** Future plans



Zygaena viciae VU Photo: Åslaug Viken

- **Business agreement with Norwegian Biodiversity Network, SABIMA in 2009**

- **Observation validation in 2009**

- Insects and Plants

- **Development of version 2.0. with The Swedish Species Information Centre aug.2008-feb. 2010**

- English version and language support
- Improved functionality

- **Launching in 2010**



# References and links

- Valland, N. (2008): Artsdatabanken. Norwegian Biodiversity Information center. *SEIS country visit workshop 13. Nov. 2008, Norway*
- Species map and species observation services ([Artsdatabanken](#)) (only norwegian)
- Global Biodiversity Information facility ([GBIF](#))

Thanks !