

The background of the slide is the flag of Norway, which features a red field with a blue cross outlined in white. The flag is shown with a slight wavy texture.

Norwegian Open Data

Web Science DTC hosted by FriProg



- Friprog is an independent, state-funded resource center for free software who assist public sector and private industry to adopt free software, and develop free software in their IT solutions.
- Their goal is to establish a culture of sharing, reuse and collaboration on public IT solutions and digital content.

Morten Amundsen, FriProg Director
Specialist responsibility for research and healthcare, with extensive experience and competence in IT solutions for the healthcare and education sectors.



- “ We are facing major changes related to the sharing and reuse of public data. Authorities in more and more countries are turning to open the data can be of great value to business, the public sector and not least for the citizen.
- Government agencies, to the extent practicable, shall make available their raw data in machine-readable format. The goal is that the government should be involved.
 - Open public data, data from the public sector made available in such a format that they can be used in new contexts.”


Examples of open government data:

Placement of trash cans, recycling points and so on
Financial statements and budgets
Survey results
Addresses and contact information for businesses

Why open up data?

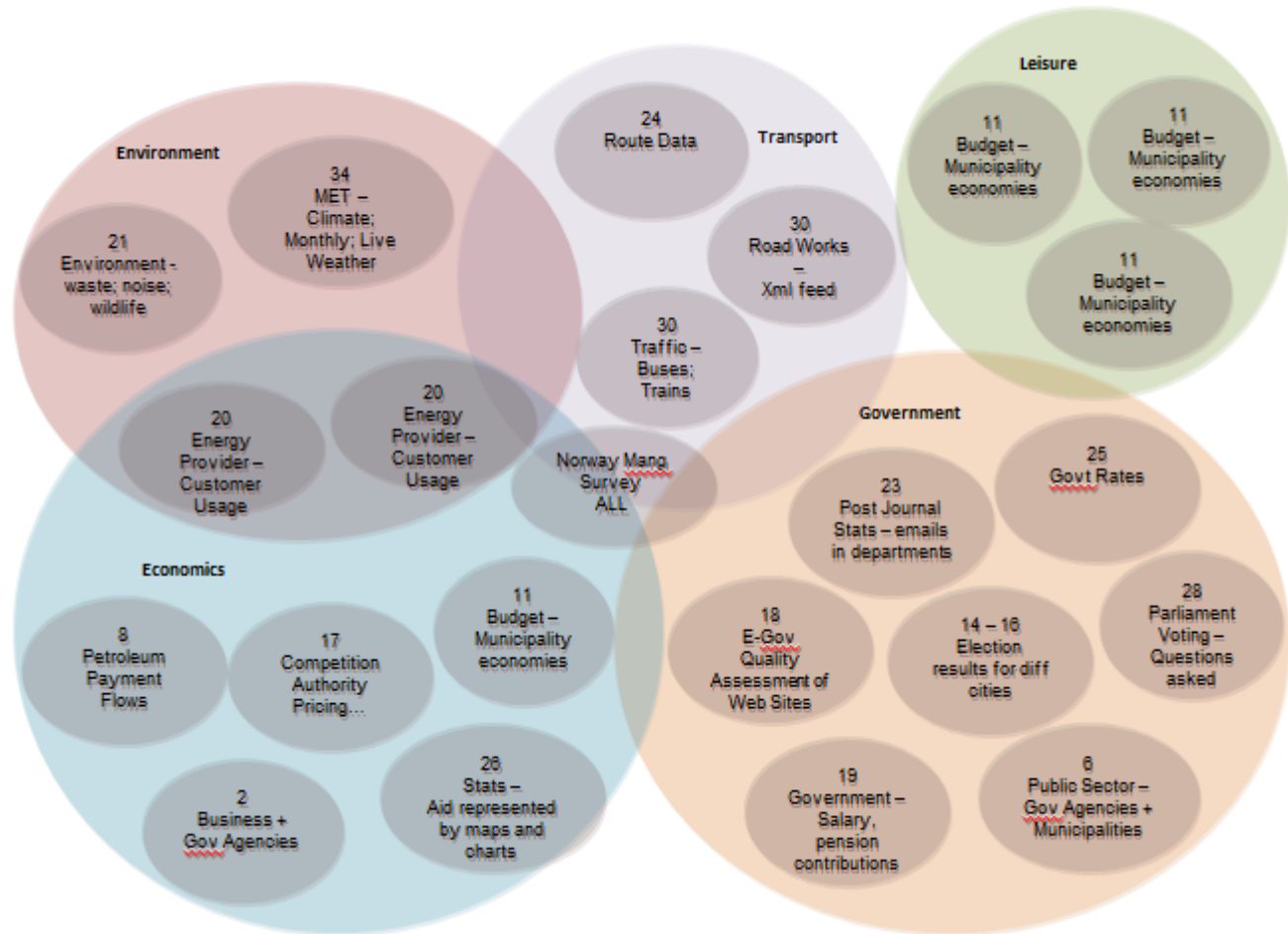
- Efficiency and Innovation
- Private sector
- Democratization
- Transparency

DTC Tasks

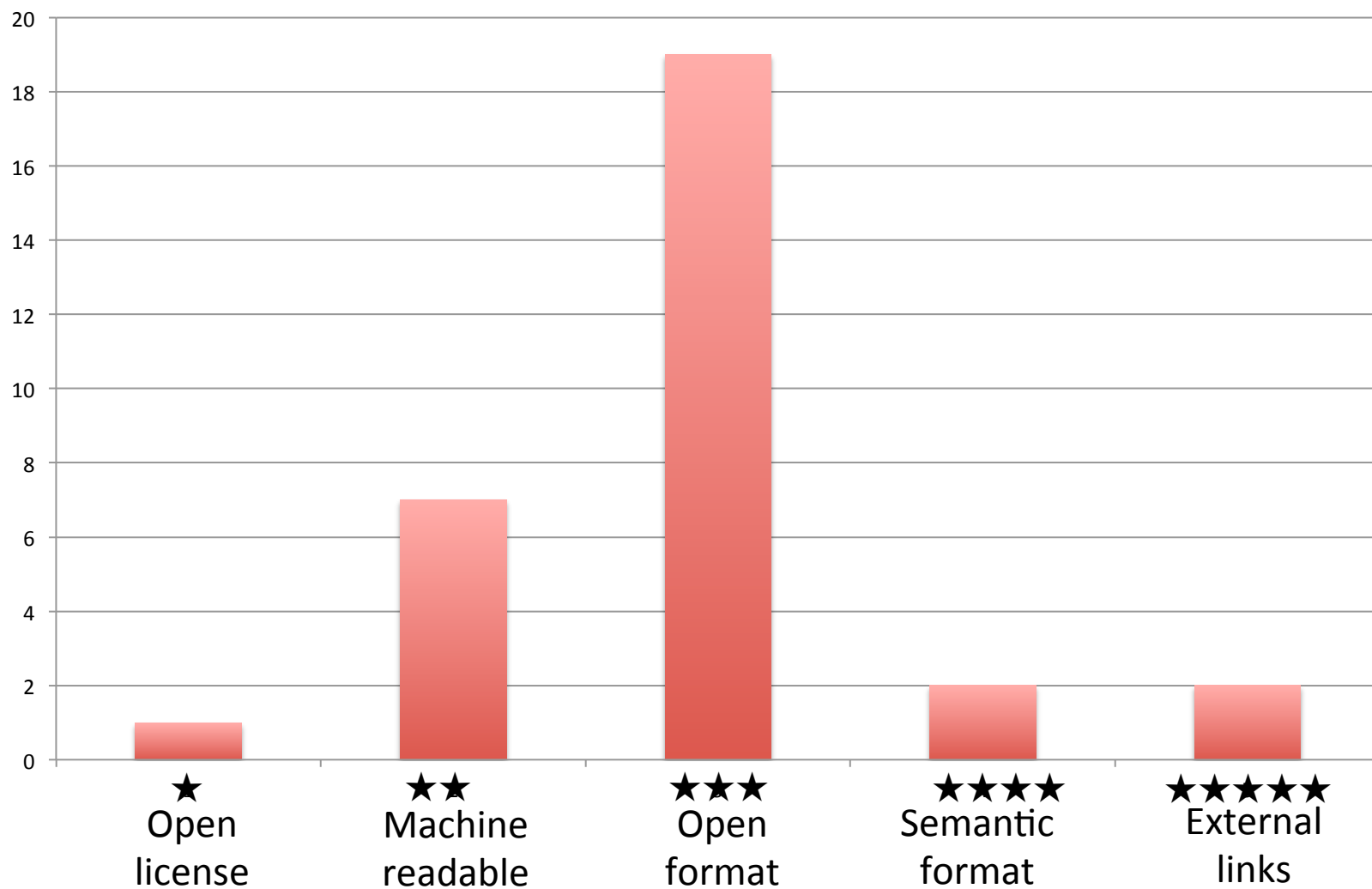
- Audit and overview of Norwegian open data registry
 - data.norge.no
 - Determine coverage of Norwegian open data collections
 - Evaluate against 5* criteria
- 
- A photograph showing a group of about seven people sitting around a large, curved wooden table in a meeting room. They are all focused on their laptops, which are open in front of them. The room has a whiteboard on the wall, a large screen, and a camera mounted on the wall. The atmosphere appears to be a collaborative work session or a meeting.
- Develop new marketing message for pro-Open Source decision making

Overview of data.norge.no

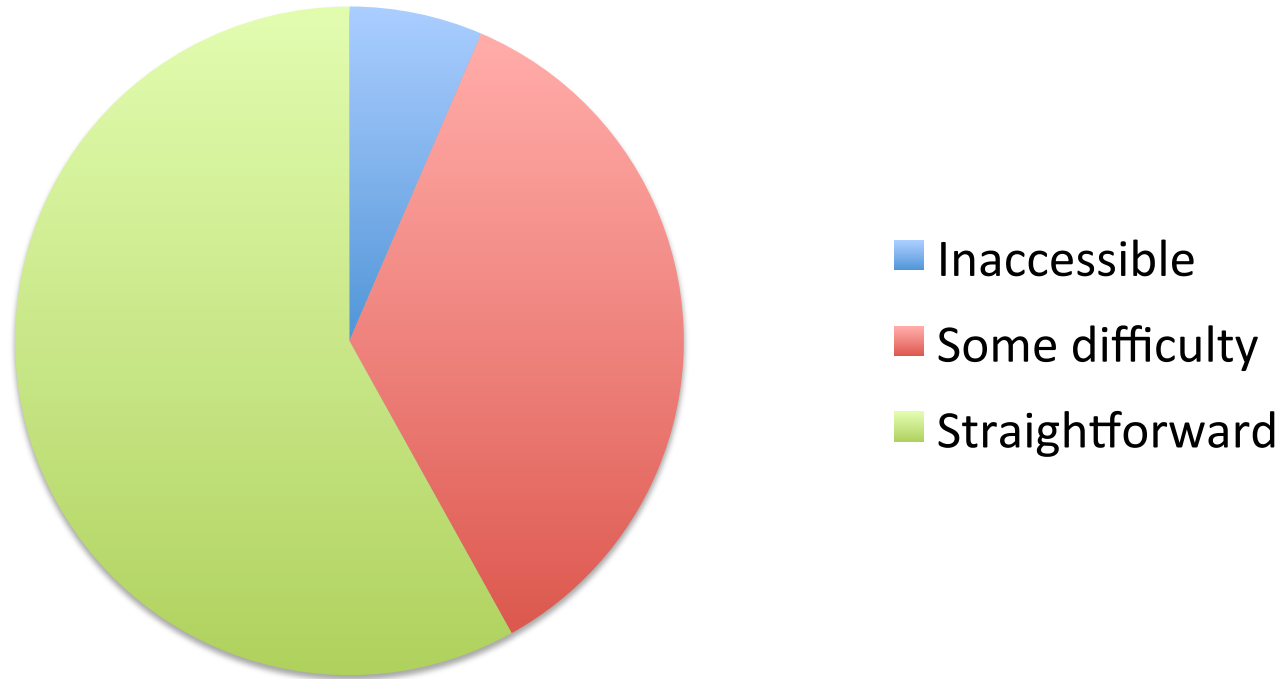
- 35 data sets
- Categories
 - Environment
 - Transport
 - Leisure
 - Economics
 - Government



Quality of data provided




Quality of data accessibility



- Inaccessible = requires human intervention
e.g. registration / email request
- Some difficulty = multiple click-throughs, baroque spreadsheet layouts

Municipalities Data – Future Work

**Statistics Norway**
Statistisk sentralbyrå

Advanced search

A-Z | Help | Contact | Norwegian

Statistics by subjectPublicationsResearchData collectionAbout Statistics Norway

[» Main page](#)

Statistics ordered by subject

00 General

National and international overviews

National

Regional

International

Elections

General elections

Local elections

Referendums, attitudes

Living conditions

Gender equality

Time use

Social indicators

01 Natural resources and the environment

Area

Land cover

Land use

Climate

Resources

Energy

Pollution

Air

Water

Soil

Waste

Municipal waste

Industrial waste

Hazardous waste

Packaging waste

Environmental economics and indicators

Environmental protection costs

Environmental accounts

02 Population

Structure

Population

Families, households

Vital statistics and migration

Births, adoptions, deaths, mortality

Migration, immigration and emigration

Marriages, divorces, and other relationships

Population projections

03 Health, social, welfare and crime

Health, general

Health conditions

Diseases, functional disabilities, causes of death

Pregnancy terminations, sterilizations

Health services

Child welfare and family counselling

Social security and social assistance

Crime and the justice

04 Education

Level of education

Educational institutions

Day-care centres, preschools

Primary and lower secondary schools

Upper secondary schools

Universities and university colleges

Adult education and other tuition

05 Personal economy and housing

Income, property, taxes

Taxes

Consumption

Dwelling and housing conditions

06 Labour market, wages

Labour force participation

Working conditions and sickness absence

Unemployment

Labour disputes

Wages and labour costs

07 Culture

Cultural offerings

Radio and television

Film and video

News agencies, newspapers, periodicals

Libraries, museums, archives etc.

Cultural activities

Membership in organisations and religious communities

Media use library visits

Sports and outdoor recreation

08 Price indices and economic indicators

Price indices

Consumer price index

Manufacturer and wholesale price indices

House price indices and construction cost indices

Other price indices

Value and volume indices

New orders, reserves of unfilled orders

Turnover

Investment

External trade

Production indices

Economic surveys, general business tendency survey

National

09 National accounts and external trade

National accounts

Balance of payments

Foreign assets and liabilities, direct investments

External trade

10 Industrial activities

Structure, business register

Corporate tax

Technological indicators, incl. ICT

Agriculture and forestry

Agriculture, hunting, wildlife conservation

Forestry

Fishing and fish farming

Mining and extraction, incl. oil and gas

Extraction of crude oil and natural gas

Service activities incidental to oil and gas extraction

Manufacturing

Manufacture of food products and beverages

Electricity, gas and water supply

Electricity, gas, steam and hot water supply

Collection, purification and distribution of water

Construction

Wholesale and retail trade, repair activities

Wholesale and retail trade

Hotels and restaurants

Transport and communication

Rail transport

Road transport

Sea transport

Air transport

Services related to transport and travel agents

Post and telecommunications

Financial enterprises

Financial institutions

Other financial enterprises

Real estate, renting and business activities

Sale and management of real estate

Research and development

Other business activities

Other service activities

11 Financial markets

Securities, credit indicators, monetary aggregates and interest rates

Bankruptcies

12 Public finances

Public finances and social security schemes

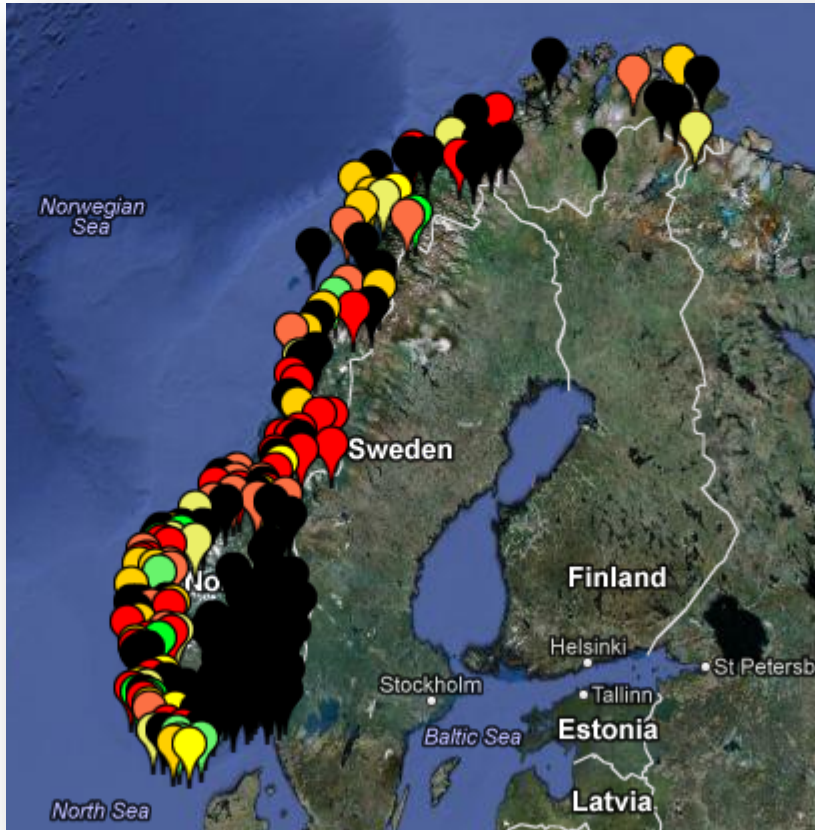
State finances

Municipal finances

Tax accounts

This is just the start!

Open Source in Norway



Penetration Statistics by Municipality

Data from Statistics Norway

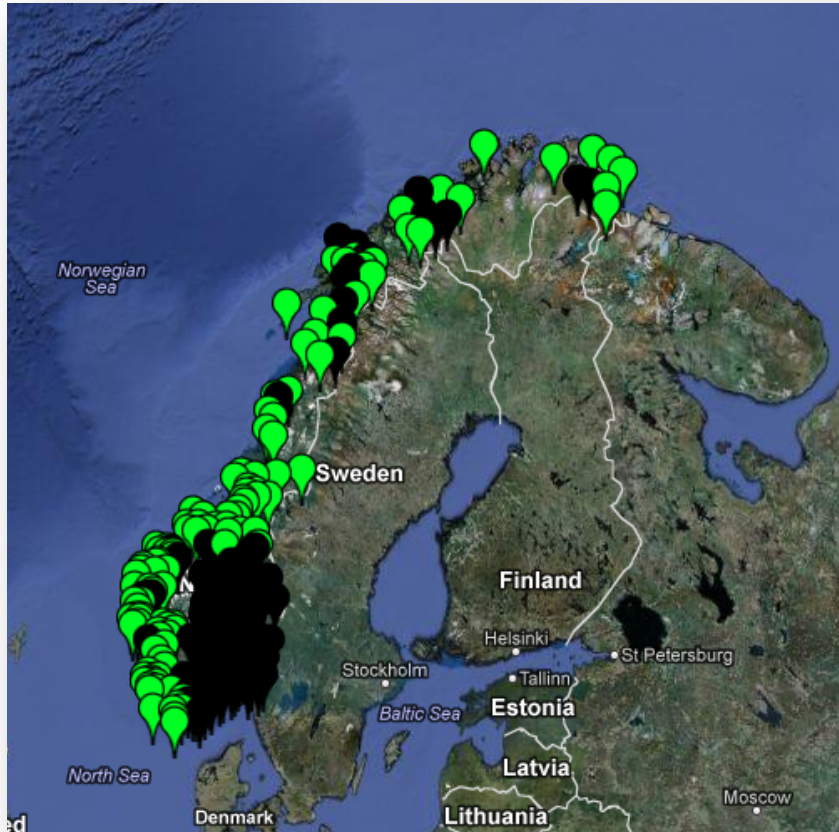
<http://www.ssb.no/>

Open Source Score relates to 10 different categories

- Open Source Servers
- Open Source Office Suite
- Open Source Office Software such as email
- Publishing
- Multimedia
- Economic System
- Databases
- Web-Platforms
- Education
- Other Areas

Scale : From **Green** (Good) to **Black** (Bad)

Open Source Penetration



Open Source Available Data Score

- Municipalities that are providing data about their Open Source usage.

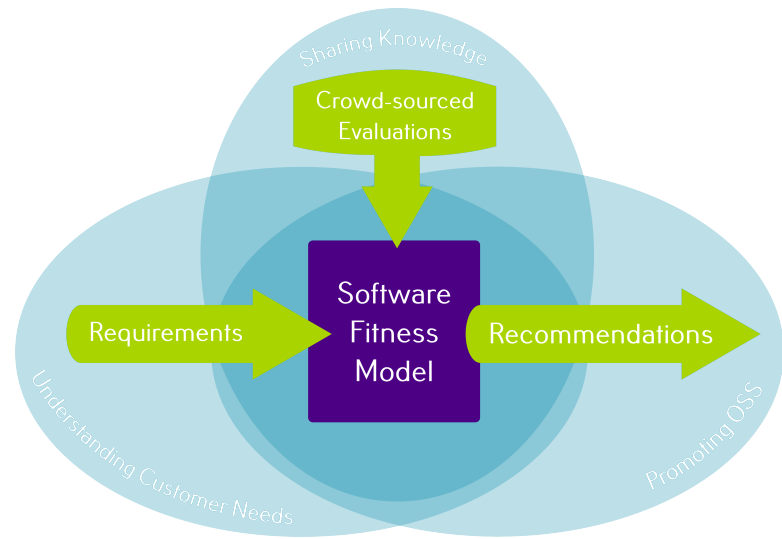
Scale : From **Green** (*Good*) to **Black** (*Unavailable*)

Data does not appear appears to be collected on a yearly basis

- Some Municipalities have data for different years
- Consistency issues

Penetration Statistics Availability by Municipality

Pro-O/S Software Recommender Model



- Support better software procurement decisions by minimising the impact of preconceptions, by
 - Creating a model of software fitness, based on government procurement policy, to provide tailored recommendations
 - Using techniques from persuasive technology to encourage consideration of Open Source solutions, where appropriate
 - Allowing organisations to share results of software evaluations with others.