

***help to dream and ease our tech life***

**focus:**

**Sense Data Exchange Format**

**Open Data Hosting**

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# sensor data exchange format



*dream one*

**we all do this our way:** (s)http post, json, xml

- Request For Comment (**RFC**) style standard proposal?
- **lessons learned:** timestamps, version, sensor type, data unit, meta data (defaults, etc.), flexible, use of state?, human readable, sample implementations, naming, independent, version, scalable, more?
- who will start this up, drive this?

# JSON example (uses state, defaults)

*dream one*

```
{
  'meta': [ { 'id': '123456ABCDE',
              'label': 'BdP-1234',
              'GPS': [ 52.123456, 6.123456], // home static
              'match': { 'bme([26]80)': 'BME\1', 'temp.*': 'temperature'},
              'sensors': [ { 'BME280': { 'temp': 'C', 'RH': '%' }, } ]
            } ],
  'data': [ { 'date': 123456789,
              'BME280': { 'temperature': 21.3, 'pressure': 1023 },
              'SPS30': { 'date': 123456790, 'PM2.5 #': 23.4 },
              'GPS': [ 52.123454, 6.123454] // dynamic
            } ]
}
```

# Open Data Hosting service



***dream two***

dream comes from Dutch Unix Users Group (Koen), we have been talking to SURFnet, Freedom.nl, network hardware sales, use of empty sender spaces eg Smilde

- several racks with ca 8 servers with # penta disk space and high bandwidth, everything Open Source
- estimated investment hardware costs € 400K (maybe less)?
- for sensors data investment ca € 100K, € 25 per year?
- **question:** can air quality initiatives raise € 100K together?
- question: what about **privacy**?
- **who** will star this? Who want to join?

**who likes these dreams?  
who wants to participate?  
who wants to stear?**

**questions / comments**

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