



Solar Keymark new database

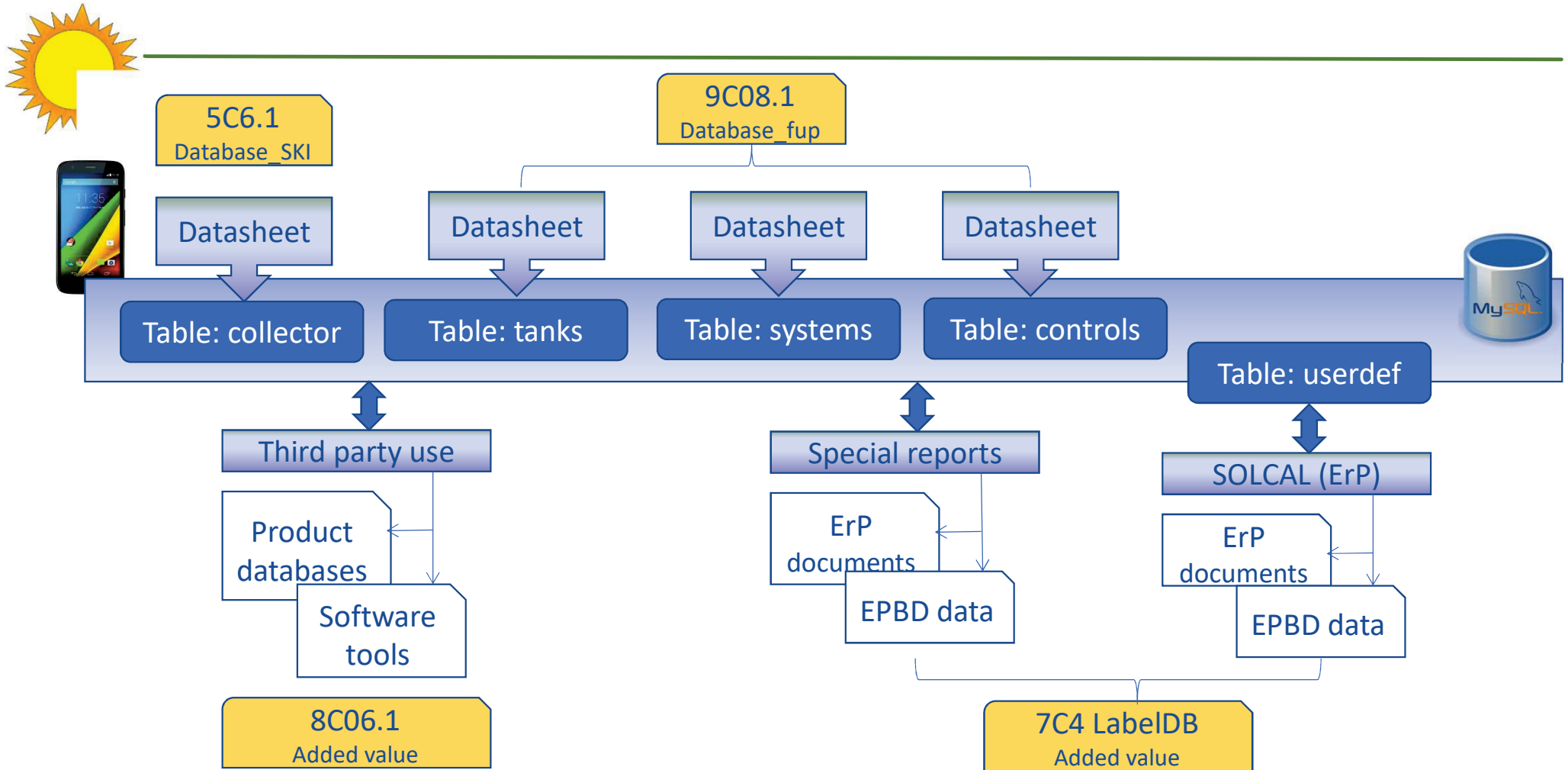
Web meeting (project team)

Gerard van Amerongen

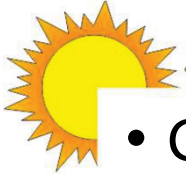
vAConsult

24.09.2018

Introduction



Introduction



- Goal of this meeting:
 - Update on the state of art
 - Comments and proposals for improvement
 - Make some decisions on specific issues
 - Decide on the presentation during SKN meeting

Database structure



Solar Keymark new database



Table: collector

Table: tanks

Table: systems

Table: controls

Data-field:

Json_Collector

Json_Tank

Json_System

Json_Control

One field containing all relevant data items in Json format

Search-field:

License Number

License Number

License Number

License Number

Certification body

Certification body

Certification body

Certification body

Test lab

Test lab

Test lab

Test lab

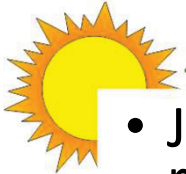
Free search field
(company, brand,..)

Free search field
(company, brand,..)

Free search field
(company, brand,..)

Free search field
(company, brand,..)

Intermezzo on JSON text



- JSON tekst string: open-standard for a collection of datdedicated, human readable, widely applied for data exchange
 - Understandable by: PHP, Javascript, Excel, C++, VB,
- Application for Solar Keymark database:
 - Store data in one field of the database
 - Upload / download datasheets
 - Download third party use
 - ...
- Example:

```
{"Certification":{"LicenseNumber":"011-7S016 R","LicenseIssueDate":"2015-02-03","CertificationBody":"CERTCO","TestLab":"TZS, ITW University Stuttgart","TestLabComments":"none","Brand":"Website","Standard":"EN 12975","TestReport":{"Report reference":"report date"},"LicensedCompany":{"Name":"GREENoneTEC Solarindustrie","Address":"Industriepark St. Veit, Energieplatz 1","PostalCode":"9300","City":"St. Veit a.d. Glan","Country":"Å-sterreich","Website":"www.greenonetec.com","Email":"info@greenonetec.com","Phone":"434241 28 136-0 / 4214 28 136-250","Remarks":null,"Type":2}},"Application":{"CollectorType":"Evacuated tubular collector",
```

Public user interface



- www.duurzaamloket.nl/SK2/index.php
- Targeting:
 - BtoB (license check, prod. specs.,...)
 - Governments (support schemes, surveillance,...)
 - Installers, composing ErP devices/packages
- Not targeting:
 - Selection of best performing product
 - For SK all certified products are good
- Website available for evaluation
 - Please comment

The screenshot shows the Solar KeyMark website interface. At the top, there's a search bar and navigation tabs for Collector, System, Tank, and Control. Below this is a table with columns for License holder company, Brand, and License number. The table lists several entries, including AMK Collectra AG and Aquasol Solartechnik GmbH. Below the table, there's a detailed view for a specific license number (011-75540 F), showing the license holder (GREENoneTEC Solarindustrie), collector name (FK 8200N4 Al-Cu BP), and various technical details like country, email, phone, brand, certification body, and standard.

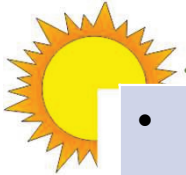
License holder company	Brand	License number
ökoTech Solarkollektoren GmbH	ökoTech	011-75837 F
ökoTech Solarkollektoren GmbH	ökoTech	011-75838 F
Acompany	Abbrand	011-752625-R
Acompany	Abbrand	078/000250

License number: 011-75540 F
 License holder: GREENoneTEC Solarindustrie
 Collector name: FK 8200N4 Al-Cu BP
 Display table: License info

License holder: GREENoneTEC Solarindustrie
 License number: 011-75540F
 Country: Austria
 Email: info@greenonetec.com
 Phone: 43(0)4212 28136 / -250
 Brand: FK 8200N4 Al-Cu BP, ...
 Certification body: CERTIF
 Issued: 2008-02-12
 Standard: EN 12975



Status



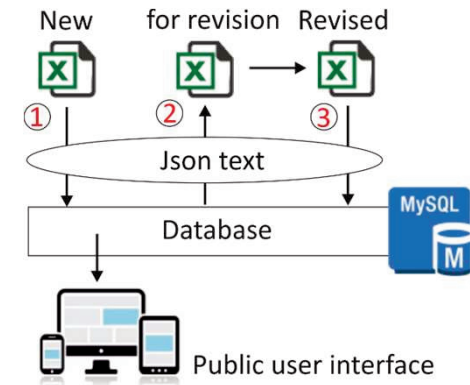
<ul style="list-style-type: none">• Database ready for evaluation<ul style="list-style-type: none">• Tables defined• Json text data collection structures defined• Filled with temporary data for illustration purposes only	<p>Not for controls yet</p> <p>Annex I report. Please comment</p>
<ul style="list-style-type: none">• Public web user interface ready for evaluation<ul style="list-style-type: none">• Designed in PHP	<p>Not for controls yet</p> <p>Please comment</p> <p>Safety analyses to do</p>
<ul style="list-style-type: none">• Uploading the current datasheets: none as yet<ul style="list-style-type: none">• Datasheets are not yet available• This may appear to be a very intensive and risky task	<p>Please send me the datasheets!</p>
<ul style="list-style-type: none">• Ready enough for presentation during next SKN	<p>If we agree on this status</p>



SK procedure: data into the database



- Upload data from current datasheets (JSON)
 - Excel datasheets extended with software: new templates
- For data revisions:
 - Download data to new templates, revise and upload
- Practical solution that can be improved in future
 - Fast implementation possible
 - Fits the current SCF budget
 - No complications with (e.g.) ScenoCalc
- Revision needed in SK procedures
 - Assistance from experts is required!
 - Volunteers?



To do's:

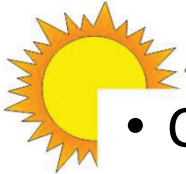
- Software addition datasheet
- Fit into SK procedure
- Implementation



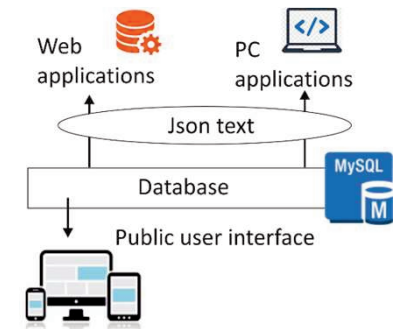
[Illustration: Download datasheet](#)



Third party access



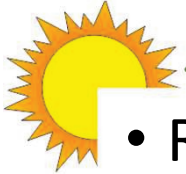
- Communication protocol: Json text string
 - Access through dedicated API's
- Examples:
 - From web application: e.g. LabelPack A+
 - From web Product database: e.g. VdZ, BIM, ...
 - From ST software: e.g. Trnsys, Transol, SolTherm
- Indirect access to data:
 - Special PHP script designed as an interface
 - Mainly to maintain control and for safety purposes
- Several functions have been implemented
 - See Annex II of the report
 - Please try it for evaluation



- Any urgent new requests an API?
- Add password?

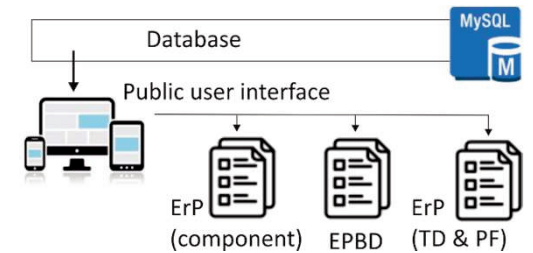


Additional data services



• Reports

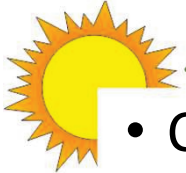
- Several reports available through the public user interface (links)
- Aimed at ErP and EPBD and to download a datasheet
- ErP technical document and product fiche
 - Solar device: only available for DST tests and ErP references (none available yet)
 - Tanks: to be implemented



Any urgent new requests reports?



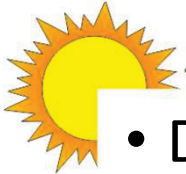
Additional services with user data



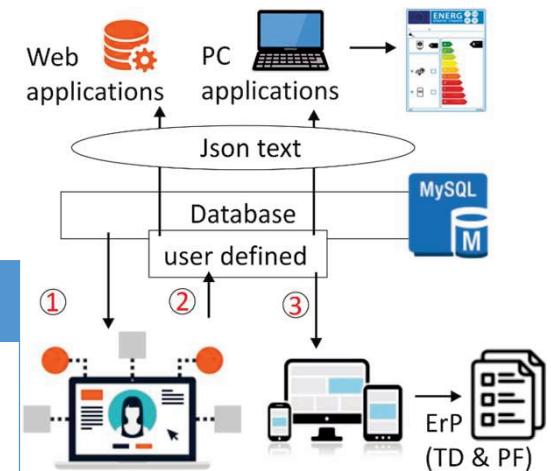
- **Collector:**
 - partial Technical document and Product fiche (SOLICS)
- **System (DST/ErP):**
 - Technical document and Product fiche
- **Tank:**
 - Technical document, Product fiche and label
- **Collector + tank + control + additional user input data:**
 - Technical document, Product fiche and label (SOLCAL)
 - SolTherm (or EN 12977-2) performance
 -
- **Additional user data:**
 - Pump power consumption
 - Number of collector modules
 -
- None certified data
- Needs be stored



Additional services with user data

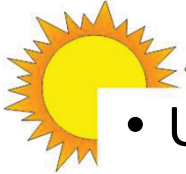


- Dilemma: where to store the user data?



Options:	Pro's	Contra's
In SK database (+ table)	<ul style="list-style-type: none"> Web app possible Sharing data is possible One database to manage Binding new SK customers 	<ul style="list-style-type: none"> Database integrity Safety & management issues
In separate database	<ul style="list-style-type: none"> Web app possible Sharing data is possible Binding new SK customers 	<ul style="list-style-type: none"> Safety & management issues Two databases to manage
On the user computer	<ul style="list-style-type: none"> User manages his own data Bind customers through App (exclusive use) 	<ul style="list-style-type: none"> No web tool possible Sharing data is difficult Software distribution needed

Database management



- Update data in the database
 - By the certification institutes through uploads ??
 - This can be improved in the future (e.g. mixed upload test lab and acceptance by CI)
 - Certification institutes are responsible for the data
- Revision of data structures (e.g. new test element result)
 - Mostly on the level of data sheets.
 - The database structure is flexible up to the level of Json packages
 - Possible revisions in the user interface software
- Help desk
 - From the database manager (public, test labs, certification bodies)
- Third party access
 - Development of specific “API’s” for data transfer (if needed) by database manager
 - If decides as such: management of contracts for granting access and financial things



Final



**THANKS FOR YOUR
TIME AND ATTENTION**