

Streamlining Quality and Safety Workflows and Reporting with Survey123 and ArcGIS Dashboards



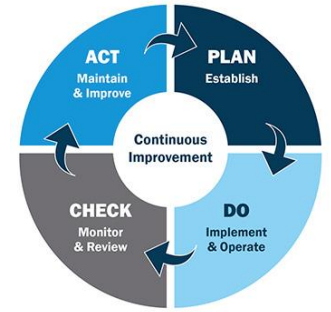
Esri Infrastructure Management and GIS Conference
October 26 – 28, 2021

Colleen Madigan Schelde
Radius

Radius

Agenda

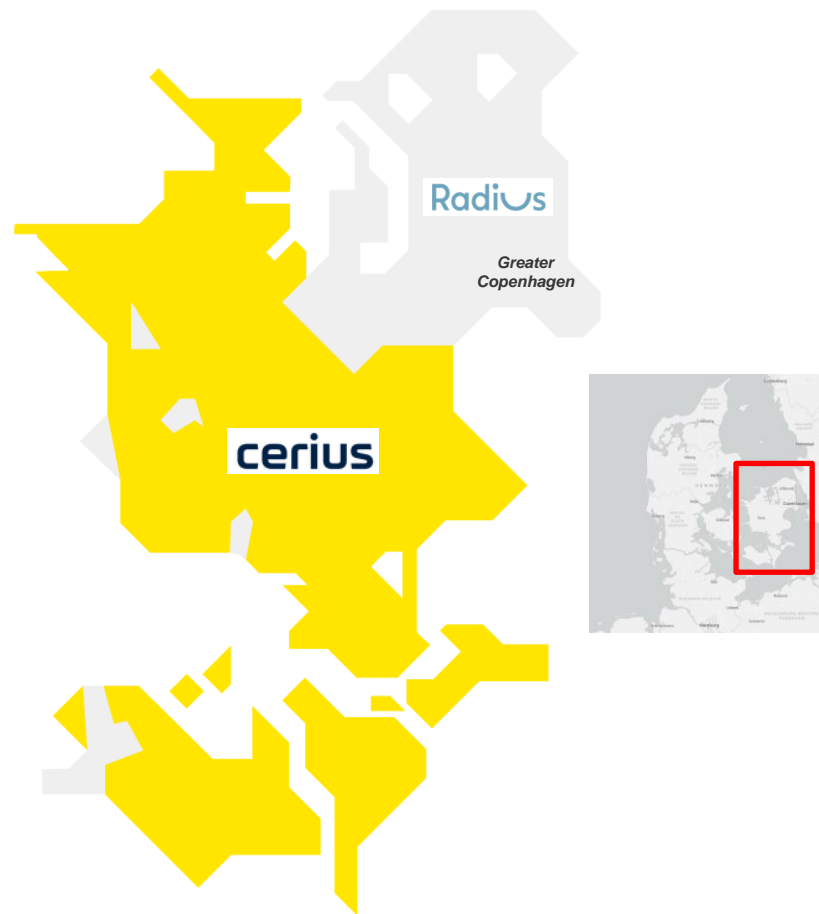
- About Us
- Project Background Information
- Streamlined Workflow and Efficient User Experience
- Building Smart Surveys with Live Calculations
- Disseminating Information Across the Organization
- Delivering Relevant Content
- Quality and Safety Esri Solution Stack
- Project Benefits



About Us

| | Radius | cerius |
|-------------------------------|-----------|---------|
| Main Stations | 92 | 116 |
| 30 og 50 kV km-net | 719 | 1,048 |
| Cable | 627 | 178 |
| Overhead Lines | 92 | 870 |
| Net Stations | 10,568 | 10,325 |
| Automated | 506 | 74 |
| 10 kV km-net | 6,830 | 9,483 |
| 0,4 kV km-net – in all | 11,340 | 14,000 |
| Cabinets | 145,437 | 151,541 |
| Customers | 1,083,549 | 400,121 |

* Information from 2019



Project Background Information



March 2019



Quality and Safety

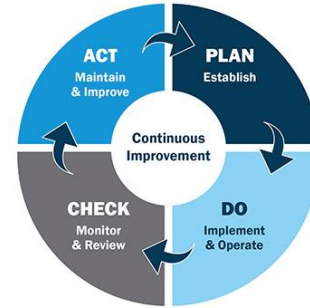
Safety Criteria

NO = FAIL

YES = PASS

NOT RELEVANT

March 2021



WENT LIVE in June 2021

Quality and Safety

14 Individual Surveys
Calculation – Total **NO**
Calculation – Total **YES**
Calculation – Total **NO** for each question
Calculation – Total **YES** for each question

One Survey - select from list of 14 Surveys with respective Questions
Calculation – Total **NO**
Calculation – Total **YES**
Calculation – Total **NO** for each question
Calculation – Total **YES** for each question
Calculation – All **NO**
Calculation – All **YES**

- All 14 individual Feature Layers from surveys are added into one Map and multiple Dashboards

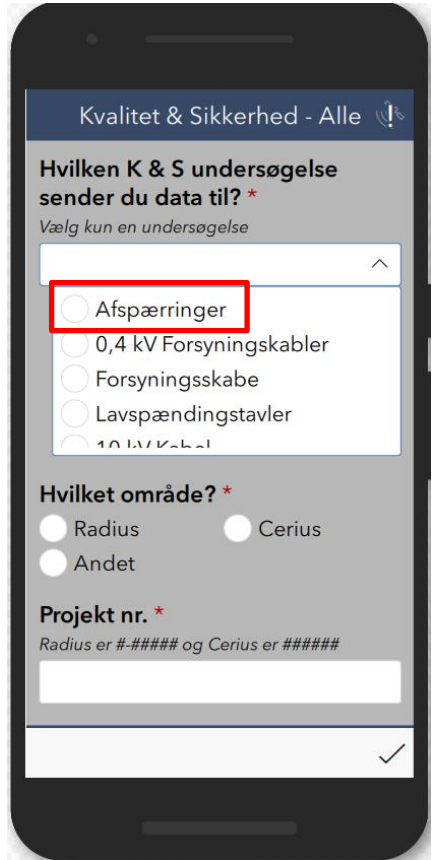
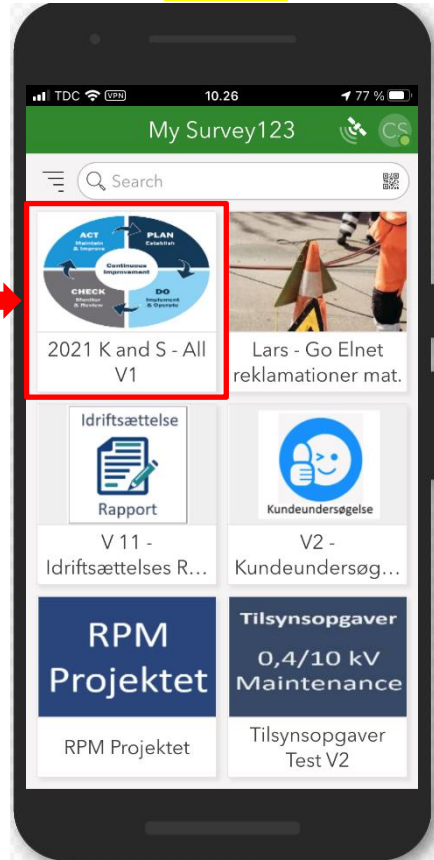
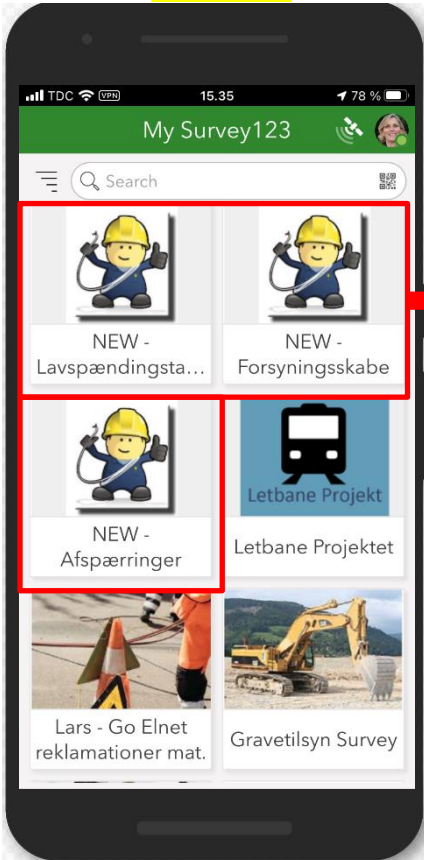
- One Feature Layer from survey is added into one Map and multiple Dashboards

Streamlined Workflow and Efficient User Experience



March 2019

June 2021





Building Smart Surveys with Live Calculations

Choices Tab

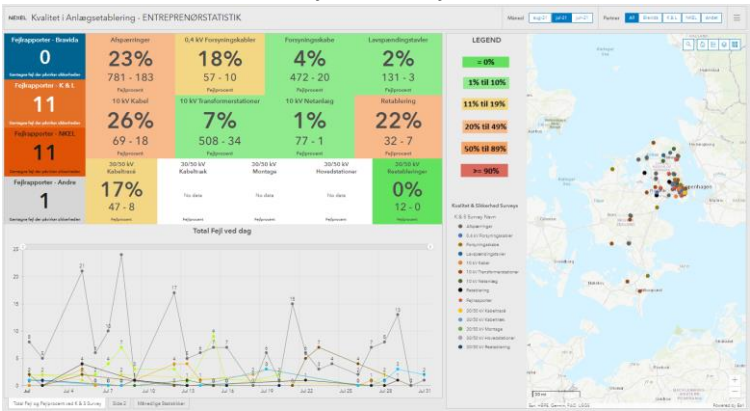
| list_name | name | label |
|-----------|------|---------------|
| answer1 | 2 | Ja |
| answer1 | 1 | Nej |
| answer1 | 0 | Ikke relevant |

| type | name | label | hint | calculation | constraint | constraint_message | relevant | bind::type | bind::esri:fieldType |
|--------------------|-----------------------|---|------|---|------------|--------------------|---------------------------------------|------------|----------------------|
| begin group | begin_mont3050 | 30/50 kV Montage | | | | | selected(\${survey_navn}, 'mont3050') | | |
| text | mont3050_muffenr | 30/50 kV Montage - Muffe nummer | | | | | | | |
| select_one answer1 | mont3050_q1 | Er krydskobling monteret kø<i>Venligst vælg ét svar.</i> | | | | | | | esriFieldTypeInteger |
| select_one answer1 | mont3050_q2 | Opmærkning af ledere og s<i>Venligst vælg ét svar.</i> | | | | | | | esriFieldTypeInteger |
| hidden | mont3050_totalnej | mont3050_totalnej | | if(\${mont3050_q1}=1,1,0) + if(\${mont3050_q2}=1,1,0) | | | | int | esriFieldTypeInteger |
| hidden | mont3050_totalja | mont3050_totalja | | if(\${mont3050_q1}=2,1,0) + if(\${mont3050_q2}=2,1,0) | | | | int | esriFieldTypeInteger |
| calculate | mont3050_totalja_nej | mont3050_totalja_nej | | \${mont3050_totalja}+\${mont3050_totalnej} | | | | | esriFieldTypeInteger |
| calculate | mont3050_percent_fejl | mont3050_percent_fejl | | (\${mont3050_totalnej})div\${mont3050_totalja}*100 | | | | | esriFieldTypeInteger |
| calculate | mont3050_q1_nej | mont3050_q1_nej | | if(\${mont3050_q1}=1,1,0) | | | | | esriFieldTypeInteger |
| calculate | mont3050_q2_nej | mont3050_q2_nej | | if(\${mont3050_q2}=1,1,0) | | | | | esriFieldTypeInteger |
| calculate | mont3050_q1_ja | mont3050_q1_ja | | if(\${mont3050_q1}=2,1,0) | | | | | esriFieldTypeInteger |
| calculate | mont3050_q2_ja | mont3050_q2_ja | | if(\${mont3050_q2}=2,1,0) | | | | | esriFieldTypeInteger |
| end group | end_mont3050 | end_mont3050 | | | | | | | |

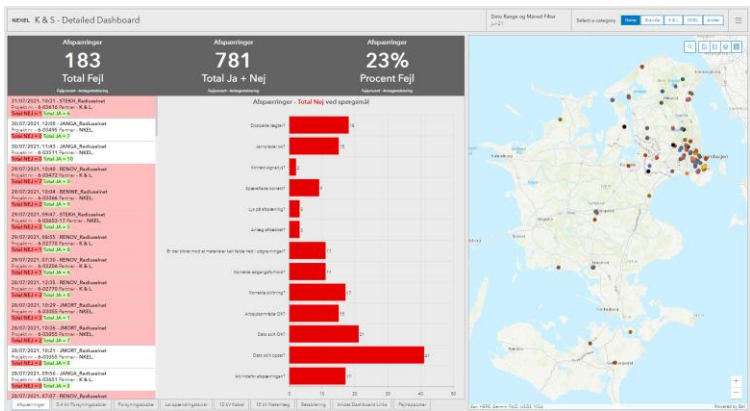
Disseminating Information Across the Organization



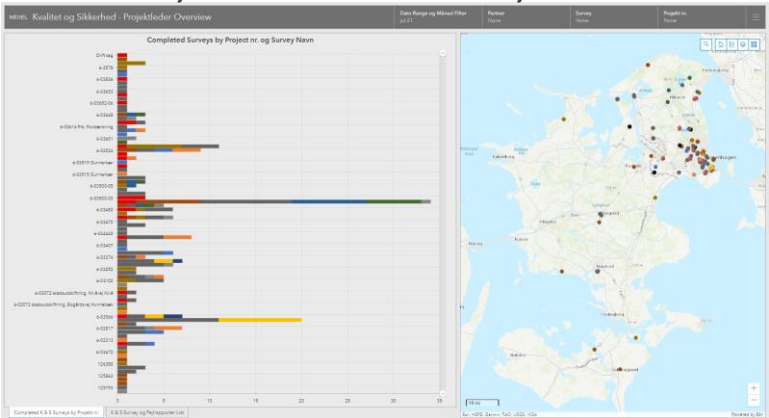
Monthly Summary Stats



Detailed Survey Information




Project Level Information for Project Leaders



Delivering Relevant Content – Internal Site



Kvalitet & Sikkerhed HOME



Anlægsetablering Dashboards

- Kvalitet i Anlægsetablering - ENTREPRENØRSTATISTIK**
Kvalitet i Anlægsetablering - ENTREPRENØRSTATISTIK måned rapport.
Explore
- Kvalitet & Sikkerhed ALLE Anlægsetablering Survey...**
Kvalitet & Sikkerhed ALLE Anlægsetablering Survey Result Viewer.
Explore
- K & S - Detailed Dashboard**
K & S - Detailed Dashboard
Explore
- K & S - Projektleder Overview**
K & S - Projektleder Overview
Explore
- Gravetilsyn Dashboard**
Gravetilsyn Dashboard is an Operations Dashboard created for the Kvalitet & Sikkerhed.
Explore
- Letbane Projekt Dashboard**
Letbane Projekt Dashboard
Explore



Delivering Relevant Content - Sites for External Contractors



Her du kan finde Dashboards og Foto Viewer fra Bravida Kvalitet og Sikkerhed Surveys.



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Her du kan finde Dashboards og Foto Viewer fra Nexel Kvalitet og Sikkerhed Surveys.



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Her du kan finde Dashboards og Foto Viewer fra K & L Kvalitet og Sikkerhed Surveys.



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Quality and Safety Esri Solution Stack

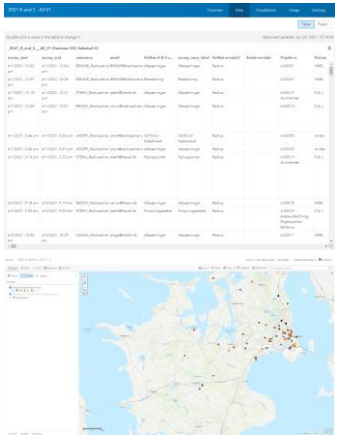
Survey123 Connect



14 surveys via one icon in Survey123 App

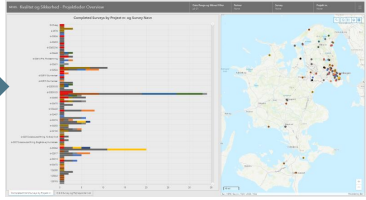
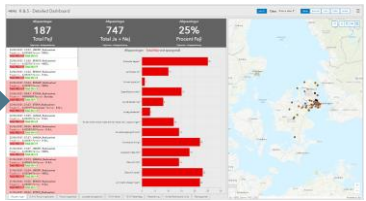
Data Capture

AGOL Feature Layer and Map



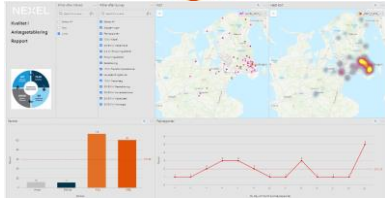

One Feature Layer and one AGOL Map (refresh rate set to 5 min)
Data Integration and Management

ArcGIS Dashboards



Data Summary and Reporting

ArcGIS Insights



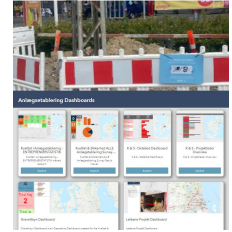
Monthly Report

Experience Builder



Provide focused content for External Users

ArcGIS HUB




Deliver all content via one url

Disseminate Content

Radius

Project Benefits

- Efficient User Experience
- Streamlined Workflow
- Happy Quality and Safety Technicians 
- Live calculations coming from survey to Feature Layer
- Improved backend data management representing a Single Source of Truth
- Integrate with existing Electric Grid and Project GIS Data
- Deliver all relevant content via one URL with HUB Site
- Provide focused content to External Users with Experience Builder
- Streamlined from start to finish where the systems do all the work (data capture, summary, reporting and content delivery)

Contact

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