ILDS Requirements

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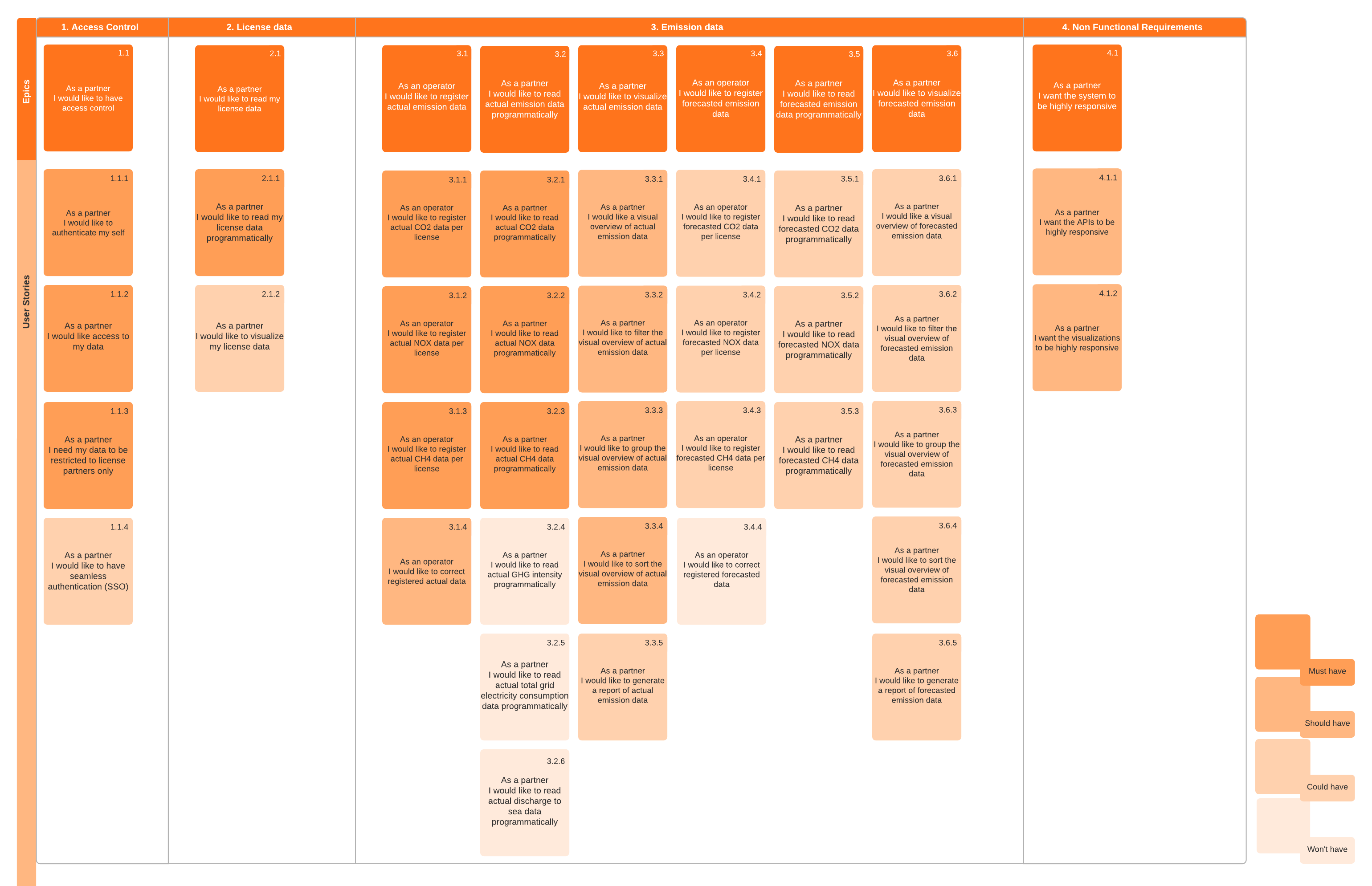
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# Overview



# Access control

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| **Id** | **Pri** | **Requirement** |
| 1.1 | Must  have | **Epic**  As a partner  I would like to have access control |
| 1.1.1 | Must  have | **User Story**  As a partner  I would like to authenticate myself  So that I can identify as a valid user  **Acceptance Criteria**  Mechanism for authentication implemented |
| 1.1.2 | Must  have | **User Story**  As a partner  I would like access to my data  So that I can access data that belongs to me  **Acceptance Criteria**  Mechanism for authorization implemented |
| 1.1.3 | Must  have | **User Story**  As a partner  I need my data to be restricted  So that only license partners can access my data  **Acceptance Criteria**  Mechanism for authorization restrictions implemented |
| 1.1.4 | Could  have | **User Story**  As a partner  I would like to have seamless authentication  So that I do not need to provide a username and password  **Acceptance Criteria**  Authentication with Single Sign On (SSO) implemented |

# License data

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| **Id** | **Pri** | **Requirement** |
| 2.1 | Must  have | **Epic**  As a partner  I would like to read my license data |
| 2.1.1 | Must  have | **User Story**  As a partner  I would like to read my license data programmatically  So that I can get an overview of my licenses in order to drill down further  **Acceptance Criteria**  Overview of my licenses received through an api:   * License Id (according to NPD) * License Name (according to NPD) |
| 2.1.2 | Could have | **User Story**  As a partner  I would like to visualize my license data  So that I can select a license for further details  **Acceptance Criteria**  Overview of my licenses is displayed   * License Id (according to NPD) * License Name (according to NPD) |

# Emission data

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| **Id** | **Pri** | **Requirement** |
| 3.1 | Must  have | **Epic**  As an operator  I would like to register actual emission data |
| 3.1.1 | Must  have | **User Story**  As an operator  I would like to register actual CO2 data per license  So that updated CO2 emission data actuals are available to partners  **Acceptance Criteria**  Implementation of a mechanism to publish measured or derived CO2 data as follows:   * CO2 emission total (tonnes) per month   + CO2 emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + CO2 emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel |
| 3.1.2 | Must  have | **User Story**  As an operator  I would like to publish measured or derived NOX data per license, field or baa on a monthly basis  So that NOX emission data actuals are available to partners  **Acceptance Criteria**  Implementation of a mechanism to register measured or derived NOX data as follows:   * NOX emission total (tonnes) per month   + NOX emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + NOX emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel |
| 3.1.3 | Must  have | **User Story**  As an operator  I would like to publish measured or derived CH4 data per license, field or baa  So that CH4 emission data are available to partners  **Acceptance Criteria**  Implementation of a mechanism to publish measured or derived CH4 data as follows:   * CH4 emission total (tonnes) per month   + CH4 emission from production   + CH4 emission from mobile units |
| 3.1.4 | Should  have | **User Story**  As an operator  . I would like be able to republish corrected dataSo that corrected meaured or derived emission data are available to partners  **Acceptance Criteria**  Implementation of a mechanism to republish emission data |
| 3.2 | Must have | **Epic**  As a partner  I would like to read measured or derived emission data programmatically |
| 3.2.1 | Must have | **User Story**  As a partner  I would like to read measured or derived CO2 data programmatically  So that I can utilize data automatically in internal and external reporting  **Acceptance Criteria**  Implementation of an API to read measured or derived CO2 data as follows:   * CO2 emission total (tonnes) per month and licens, field, baa based on what is published from the operator side   + CO2 emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + CO2 emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel |
| 3.2.2 | Must have | **User Story**  As a partner  I would like to read measured or derived NOX data programmatically  So that I can utilize data automatically in internal and external reporting  **Acceptance Criteria**  Implementation of an API to read measured or derived NOX data as follows:   * NOX emission total (tonnes) per month and license, field, baa based on what is published from the operator side   + NOX emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + NOX emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel |
| 3.2.3 | Must have | **User Story**  As a partner  I would like to read measured or derived CH4 data programmatically  So that I can utilize data automatically in internal and external reporting  **Acceptance Criteria**  Implementation of an API to read measured or derived CH4 data as follows:   * CH4 emission total (tonnes) per month and license, field, baa based on what is publisged from the operator side   + CH4 emission from production   + CH4 emission from mobile units |
| 3.2.4 | Won’t have | **User Story**  As a partner  I would like to read measured or derived GHG intensity programmatically  So that I can utilize data automatically in internal and external reporting  **Acceptance Criteria**  Implementation of an API to readmeasured or derived GHG intensity data as follows:   * GHG intensity (kg CO2e per boe / sm3) per month and license, field, baa based on what is published from the operator side |
| 3.2.5 | Won’t have | **User Story**  As a partner  I would like to read measured or derivedtotal grid electricity consumption data programmatically  So that I can utilize data automatically in internal and external reporting  **Acceptance Criteria**  Implementation of an API to read measured or derived total grid electricity consumption data as follows:   * Total grid electricity consumption (MWh) per month and license, field, baa based on what the operator publishes |
| 3.2.6 | Won’t have | **User Story**  As a partner  I would like to read measured discharge to sea data programmatically  So that I can utilize data automatically in internal and external reporting  **Acceptance Criteria**  Implementation of an API to read measured discharge to sea data as follows:   * Oil in water (mg/l) * Unintentional discharge to sea (number) |
| 3.3 | Should  have | **Epic**  As a partner  I would like to visualize measured or derived emission data |
| 3.3.1 | Should  have | **User Story**  As a partner  I would like a visual overview of measured or derived emission data  So that I can easily understand the underlying data  **Acceptance Criteria**  Visual overview of actual emission data is displayed:   * CO2 emission total (tonnes)   + CO2 emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + CO2 emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel * NOX emission total (tonnes)   + NOX emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + NOX emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel * CH4 emission total (tonnes)   + CH4 emission from production   + CH4 emission from mobile units |
| 3.3.2 | Should  have | **User Story**  As a partner  I would like to filter the visual overview of actual emission data  So that I can work more efficiently  **Acceptance Criteria**  Visual overview of actual emission data can be filtered by:   * License Name (according to NPD) [One, Selection, All] * Date Period   + From Month/Year   + To Month/Year * Emission type   + CO2   + NOX   + CH4 |
| 3.3.3 | Should  have | **User Story**  As a partner  I would like to group the visual overview of actual emission data  So that I can work more efficiently  **Acceptance Criteria**  Visual overview of actual emission data can be grouped by:   * License Name (according to NPD) * Date Period   + From Month/Year   + To Month/Year * Emission type   + CO2   + NOX   + CH4 |
| 3.3.4 | Should  have | **User Story**  As a partner  I would like to sort the visual overview of actual emission data  So that I can work more efficiently  **Acceptance Criteria**  Visual overview of actual emission data can be sorted by:   * License Name (according to NPD) * Date Period   + From Month/Year   + To Month/Year * Emission type   + CO2   + NOX   + CH4 * Emission values |
| 3.3.5 | Could have | **User Story**  As a partner  I would like to generate a report of actual emission data  So that I can share it easily with internal and external stakeholders  **Acceptance Criteria**  Report of actual emission data is generated to a suitable format (i.e PDF) based on the overview and according to the filter, grouping and sorting settings |
| 3.4 | Could have | **Epic**  As an operator I would like to register forecasted emission data |
| 3.4.1 | Could have | **User Story**  As an operator  I would like to register forecasted CO2 data per license  So that forecasted CO2 emission data are available to partners  **Acceptance Criteria**  Implementation of a mechanism to register forecasted CO2 data as follows:   * CO2 emission total (tonnes)   + CO2 emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + CO2 emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel |
| 3.4.2 | Could have | **User Story**  As an operator  I would like to register forecasted NOX data per license  So that forecasted NOX emission data are available to partners  **Acceptance Criteria**  Implementation of a mechanism to register forecasted NOX data as follows:   * NOX emission total (tonnes)   + NOX emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + NOX emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel |
| 3.4.3 | Could have | **User Story**  As an operator  I would like to register forecasted CH4 data per license  So that forecasted CH4 emission data are available to partners  **Acceptance Criteria**  Implementation of a mechanism to register forecasted CH4 data as follows:   * CH4 emission total (tonnes)   + CH4 emission from production   + CH4 emission from mobile units |
| 3.4.4 | Won’t have | **User Story**  As an operator  I would like to correct registered forecasted data  So that corrected forecasted emission data are available to partners  **Acceptance Criteria**  Implementation of a mechanism to correct forecasted emission data |
| 3.5 | Could have | **Epic**  As a partner  I would like to read forecasted emission data programmatically |
| 3.5.1 | Could have | **User Story**  As a partner  I would like to read forecasted CO2 data programmatically  So that I can utilize data automatically in internal and external reporting  **Acceptance Criteria**  Implementation of an API to read forecasted CO2 data as follows:   * CO2 emission total (tonnes)   + CO2 emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + CO2 emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel |
| 3.5.2 | Could have | **User Story**  As a partner  I would like to read forecasted NOX data programmatically  So that I can utilize data automatically in internal and external reporting  **Acceptance Criteria**  Implementation of an API to read forecasted NOX data as follows:   * NOX emission total (tonnes)   + NOX emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + NOX emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel |
| 3.5.3 | Could have | **User Story**  As a partner  I would like to read forecasted CH4 data programmatically  So that I can utilize data automatically in internal and external reporting  **Acceptance Criteria**  Implementation of an API to read forecasted CH4 data as follows:   * CH4 emission total (tonnes)   + CH4 emission from production   + CH4 emission from mobile units |
| 3.6 | Could have | **Epic**  As a partner  I would like to visualize forecasted emission data |
| 3.6.1 | Could have | **User Story**  As a partner  I would like a visual overview of forecasted emission data  So that I can easily understand the underlying data  **Acceptance Criteria**  Visual overview of forecasted emission data is displayed:   * CO2 emission total (tonnes)   + CO2 emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + CO2 emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel * NOX emission total (tonnes)   + NOX emission from production     - Fuel gas     - Flaring (gas)     - Diesel   + NOX emission from mobile units     - Fuel gas     - Flaring (gas, oil)     - Diesel * CH4 emission total (tonnes)   + CH4 emission from production   + CH4 emission from mobile units |
| 3.6.2 | Could have | **User Story**  As a partner  I would like to filter the visual overview of forecasted emission data  So that I can work more efficiently  **Acceptance Criteria**  Visual overview of forecasted emission data can be filtered by:   * License Name (according to NPD) [One, Selection, All] * Date Period   + From Month/Year   + To Month/Year * Emission type   + CO2   + NOX   + CH4 |
| 3.6.3 | Could have | **User Story**  As a partner  I would like to group the visual overview of forecasted emission data  So that I can work more efficiently  **Acceptance Criteria**  Forecasted emission data can be grouped by:   * License Name (according to NPD) * Date Period   + From Month/Year   + To Month/Year * Emission type   + CO2   + NOX   + CH4 |
| 3.6.4 | Could have | **User Story**  As a partner  I would like to sort the visual overview of forecasted emission data  So that I can work more efficiently  **Acceptance Criteria**  Visual overview of forecasted emission data can be sorted by:   * License Name (according to NPD) * Date Period   + From Month/Year   + To Month/Year * Emission type   + CO2   + NOX   + CH4 * Emission values |
| 3.6.5 | Could have | **User Story**  As a partner  I would like to generate a report of forecasted emission data  So that I can share it easily with internal and external stakeholders  **Acceptance Criteria**  Report of forecasted emission data is generated to a suitable format (e.g PDF) based on the overview and according to the filter, grouping and sorting settings |

# Non functional requirements

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| **Id** | **Pri** | **Requirement** |
| 4.1 | Should have | **Epic**  As a partner  I want the system to be highly responsive |
| 4.1.1 | Should have | **User Story**  As a partner  I want the APIs to be highly responsive  So that I can work efficiently  **Acceptance Criteria**  Less than 200 millisecond response time |
| 4.1.2 | Should have | **User Story**  As a partner  I want the visualizations to be highly responsive  So that I can work efficiently  **Acceptance Criteria**  Less than 500 millisecond response time |
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