



Intelligent Food Safety Control

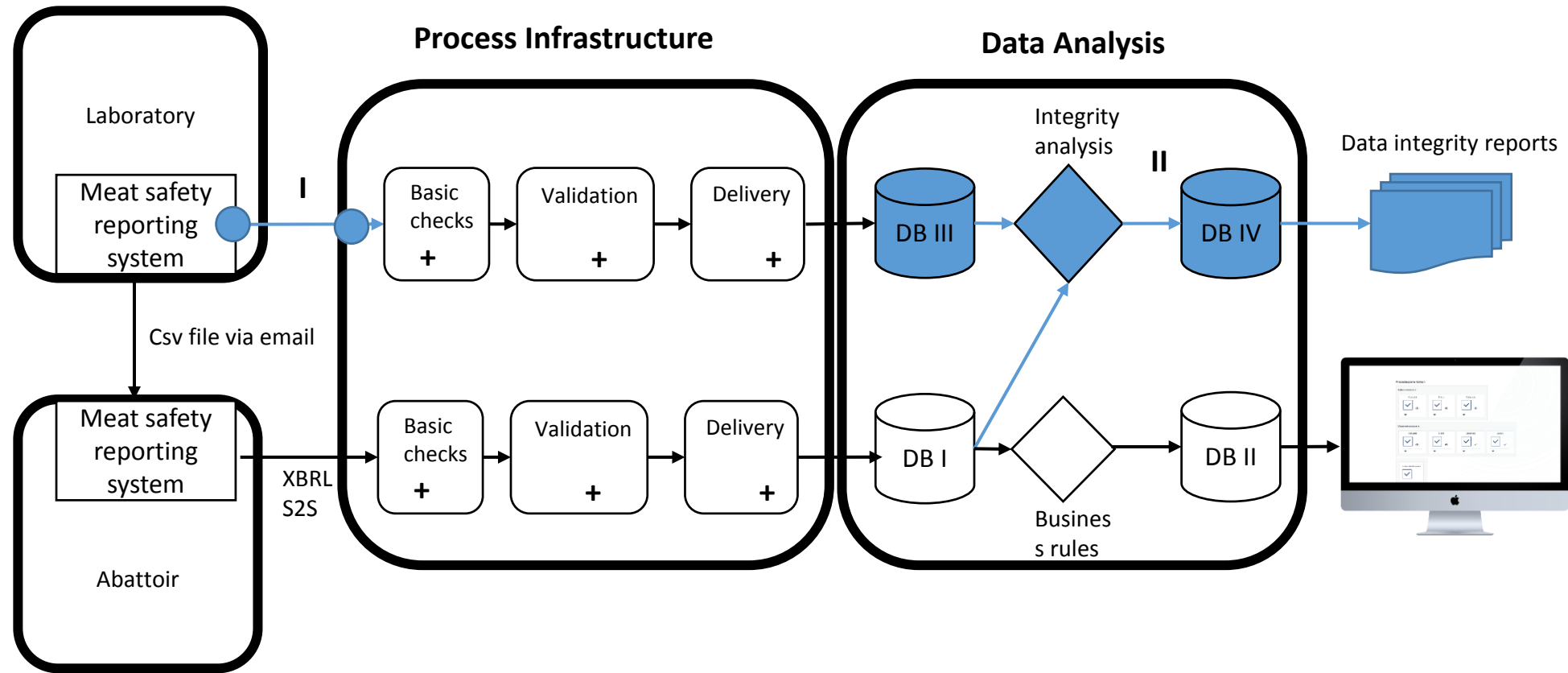
# Project description

- The goal of this project is to develop, test and implement an automated data integrity service.
- This service will strengthen the already running Continuous Control Monitoring (CCM) platform. The services offered via the CCM platform provide the following benefits:
  - Using the platform, laboratories can exchange data in a standard format with their clients (the abattoirs) and the CCM platform via a secured channel.
  - Better quality control through business intelligence: the availability of near real time and validated data on your performance changes the game of quality control.
  - Other stakeholders – such as processors up the chain or retailers – can request data in a structured format. Thanks to the data integrity services on top of other controls, other stakeholders can be sure that the data they get is trustworthy.
  - Positive corporate reputation/branding: any company with a state-of-the-art food safety control system demonstrates both the willingness and ability to be transparent about its production processes. Being transparent on your performance on food safety control is a clear signal that the company is compliant and committed to provide high-quality and safe meat products.
  - Predictable food safety monitoring cost thanks to a predefined service fee (monthly or annually).

# Project output and outcome

- The anticipated **output** consist of two main solution components:
  - (1) an interface for secure and reliable information exchange and
  - (2) an automated analysis service.
- The anticipated **outcome**: reliable and cost-effective instrument for continuous food safety control monitoring.

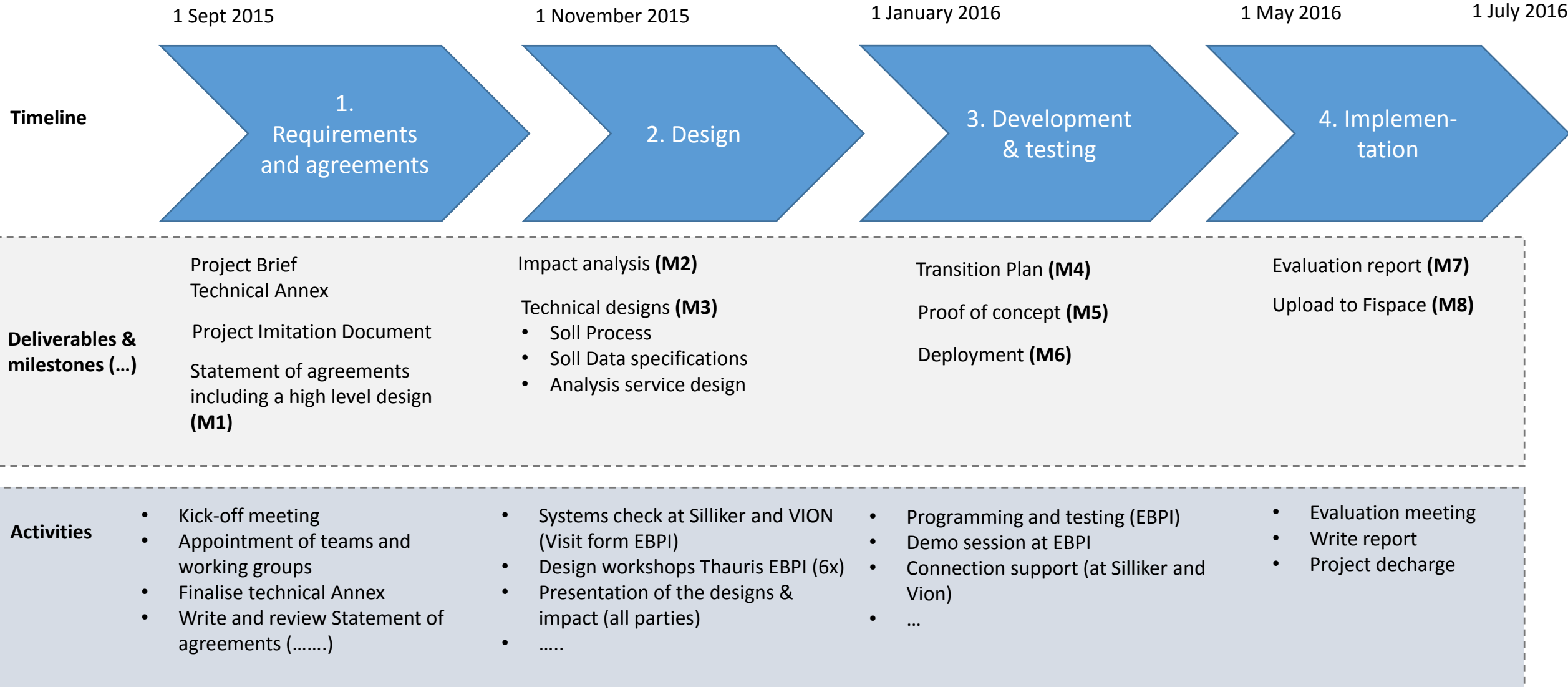
# Project focus area's



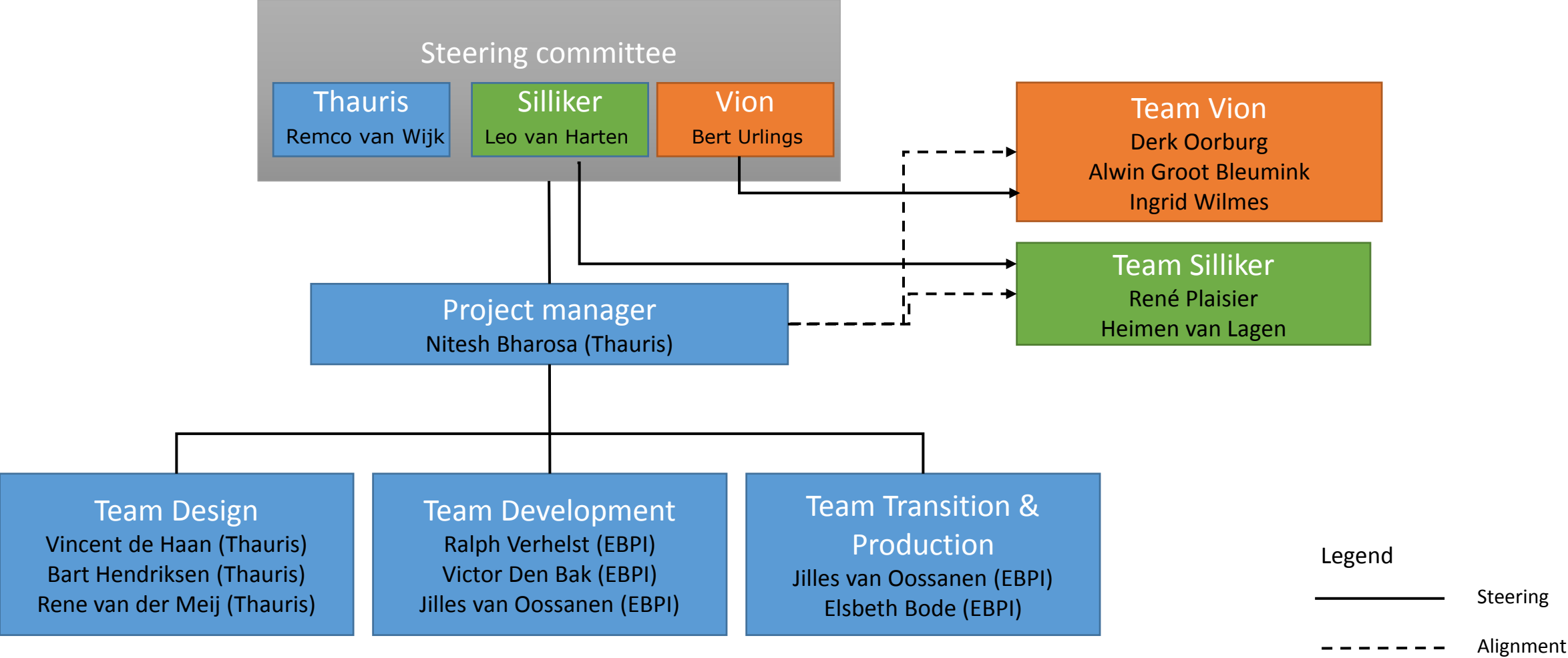
# The following 8 products will be delivered with a differentiation between management products (MP) and specialist products (SP)

1. Statement of agreements: document containing an initial (high level) design of the envisioned solution including features, requirements, constraints for the technical implementation. This document also includes the rules for using the data integrity services as agreed by all stakeholders (MP).
2. Impact assessment: effects and required modifications at VION, Silliker and in the current CCM platform considering the features of the envisaged solution (SP).
3. Technical designs of (SP):
  - Interface service used for information exchange (in BPMN).
  - Analysis service: including the design specifications (in BPMN).
  - Data specification design (in XBRL).
4. Transition plan: how do we go from design and development tot testing and production? (MP)
5. Proof of concept: initial realisation of solution components, including the necessary adaptations to the underlying technical elements (i.e. the interface, taxonomy and analysis service) (SP).
6. Deployment of the realised/ready to deploy solution (SP): transition to production.
7. Upload of the generic solution description in the FIWARE Catalogue (SP).
8. Evaluation report: overall evaluation of the project and the lessons learned (MP).

# Phases



# Project organisation



# The following metrics will be used to evaluate and eventually accept the proposed solution:

- **Usability:** can the laboratory adequately disclose meat safety test results using the CCM platform? We strive for 99,8% message delivery success. As sender of data, the laboratory will receive instant notification on the status of the message send (i.e. received, suitable for processing etc.).
- **Secured information exchange:** can fake/spoofed messages come into the platform and affect the results of the analysis service? This metric can be measured using a Security Monitoring suite. We strive for 100% security. One of the FIWARE generic enablers provides this functionality and will be considered for reuse in the CCM platform.
- **Fitness for use:** does the format/method for communicating results from the analysis service align with the control and supervision requirements of VION? We strive for 100% usability and want to measure this using a questionnaire. Suggestions for improvement will be discussed with the business partners and may lead to requests for changes regarding the solution (beyond the scope of this project).
- **Accuracy:** how well does the analysis service detect inconsistencies between VION data (source data) and laboratory data (verification data)? This metric can be measured using simulated (deliberately inconsistent) messages and a sensitivity analysis. We strive for 100% accuracy.
- **Reusability:** can the analysis service developed be reused for other data verification purposes? We strive for maximum reusability, acknowledging that some minor aspects of the solution (e.g., the business rules) may require minor adjustments for reuse. This metric can be measured through use case analysis: we will describe two other use cases for the proposed solution and evaluate the necessary modifications. We strive for a 100% reusability rate.
- **Cost:** the realisation of the solution should not exceed the allocated budget. This metric will be measured at every milestone. As the design and development hours of specialist form the majority of the project cost, clear requirements and strict project management will be necessary. We strive for a 100% budget compliance rate.
- **Delivery time:** the solution should be ready by the second quarter of 2016. This means that information exchange and analysis should be possible by May 2016. The project manager is responsible for planning and can take additional actions to ensure that the timeline is met within the budget.





## Contact Information

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