

## Requirements management to the max

TopTeam at one of the largest telecommunications providers in The Netherlands

**A single Business Support System and Operations Support System (BSS-OSS); that was the goal of the company, due to the merger of two large telecommunications providers in The Netherlands.**

**To achieve this an Agile approach was chosen for the business analysis process, executed by almost 100 people divided over a number of teams.**

**People from the business, IT and external suppliers worked seamlessly together on this large and complex program, performing business analysis in an advanced Agile way. The powerful business analysis tool TopTeam Analyst was used to support the entire program.**

### **A telco merger in The Netherlands**

To give you an impression on the sheer size of the business in The Netherlands, the new company brings together almost 9 million customers, over 280 shops, 5.000 mobile network base stations, 7 million households using the fixed network, 38.000 km glass fiber cable, 400.000 km coax cable and almost 8.000 employees.

Telecommunication has become inseparable from today's modern society. Can anyone imagine being without telecommunication services, for both private and business purposes? Developments in telecommunications are going extremely fast. Not just from a technological point of view, but also from a business perspective. Telecom providers are constantly developing new products and services to stay competitive and are collaborating to achieve a stronger market position.

Two of the leading telecom providers in The Netherlands recently merged to become a new entity in the telecoms playing field. To guarantee the best user experience, integration of fixed and mobile services was necessary. The merger allowed them to improve existing services and develop new, integrated communication and entertainment services for both private consumers as well as businesses.

### **A single BSS-OSS**

As to be expected such a merger introduces quite a few challenges, but for the sake of this story we will limit ourselves to the Business Support Systems and Operations Support Systems (BSS-OSS) part. Before the merger, each company had its own business- and operational support systems. The merger required this application landscape to become one new system, leveraging the benefits of the newly formed company.

To make this happen, a dedicated program was set up involving people from business and IT, working together to capture the needs of the new organization taking an Agile approach. Several teams were involved in the execution of the program, focused on specific business areas like sales & ordering, customer communication, billing & finance, support, etc. Through an extensive Agile business analysis process, business needs were translated into a clear specification for a new and integrated BSS-OSS. The development of the system is executed by both internal and external suppliers.

## A tool to manage business analysis

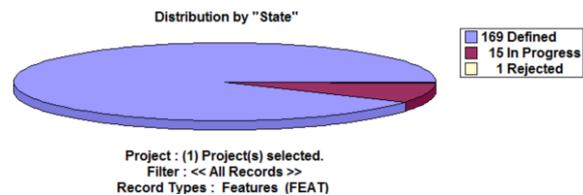
Before the merger, a group of senior End-2-End (E2E) designers concluded an extensive market research and Proof-of-Concept to find a business analysis tool to guide them through the analysis and capture the existing knowledge related to their business and operational support systems. The objective was to run all projects affecting the BSS-OSS systems from a central library. This library is used to populate the individual projects with relevant specifications, enabling them to make the necessary changes and enhancements. The individual projects merge their reviewed and approved updates back into the main baseline. Having many, often parallel running, projects with a huge number of changes and enhancements, this approach allows a controlled way to manage the total application landscape specifications.

Given the size of the program it was essential to work with a powerful business analysis tool to manage all this. TopTeam Analyst was selected to become the backbone to support the entire Agile business analysis process executed by the program. In addition, the business-as-usual projects, which continue to run in anticipation of the new BSS-OSS system, are using TopTeam to support a more traditional business analysis process.

Today, over 100 people from business, IT and the external supplier are working jointly in TopTeam on a daily basis. TopTeam is the central point of "truth" driving development & integration towards one new BSS-OSS. While doing so, people are using the full spectrum of TopTeam features.

## Program Management

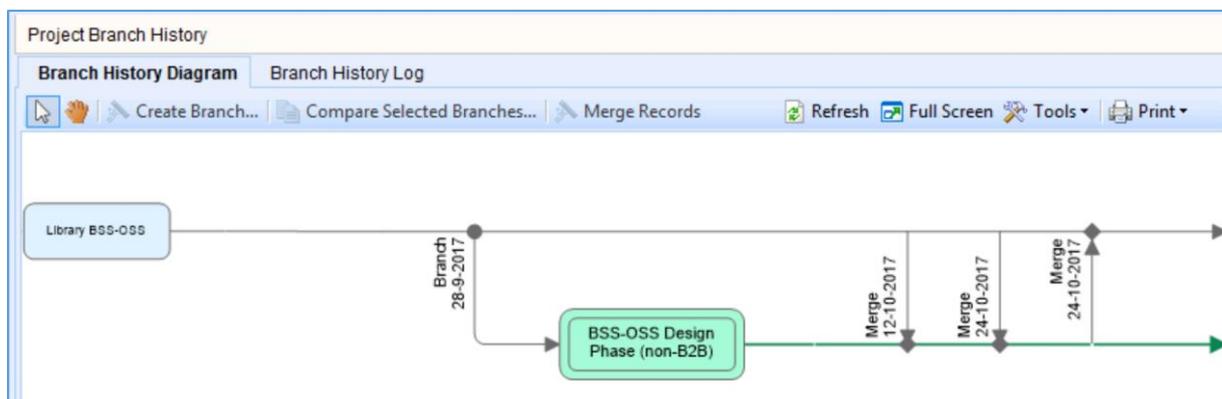
To organize the work, the program management and PMO team use TopTeam's Agile features to set up project iterations, sprints and releases for each team to plan their work, and to monitor progress. Tasks and other backlog items are assigned to team members and move through the Kanban until they are done



Various reports and dashboards have been created to monitor progress and allow reporting to management.

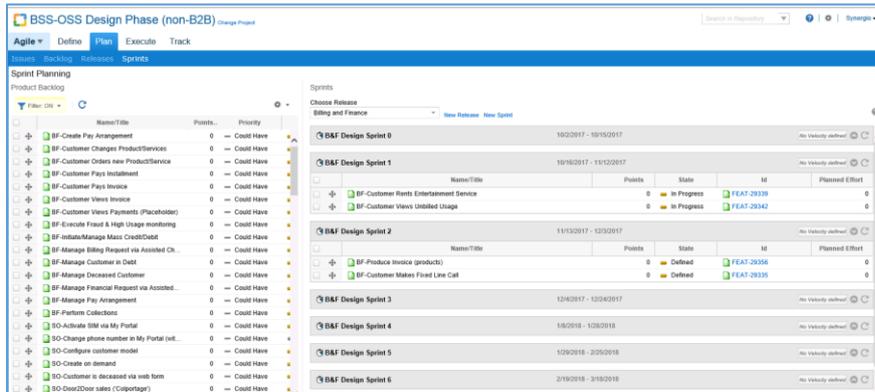
## Configuration Management

While the various teams execute the work items from the backlog, a continuous stream of new specification deliverables are being produced. This includes business requirements, use cases, IT components and their functions, interfaces and detailed requirements, screen mockups, sequence diagrams, data models and all kinds of documents. All these deliverables are being reviewed and once approved, merged back into the central library at the end of every iteration. The TopTeam versioning, baselining, branching & merging and sharing features are ideally suited to manage this complex process.



## Backlog Management

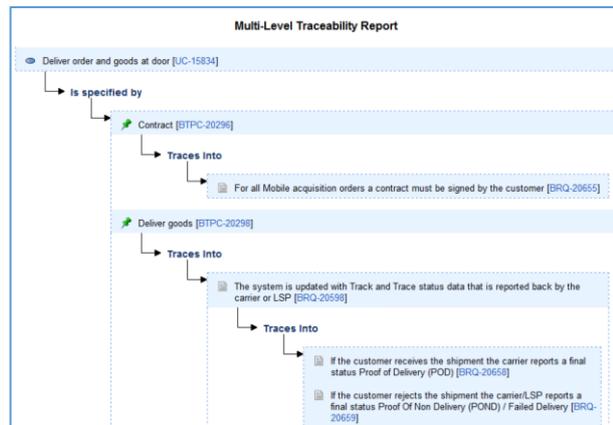
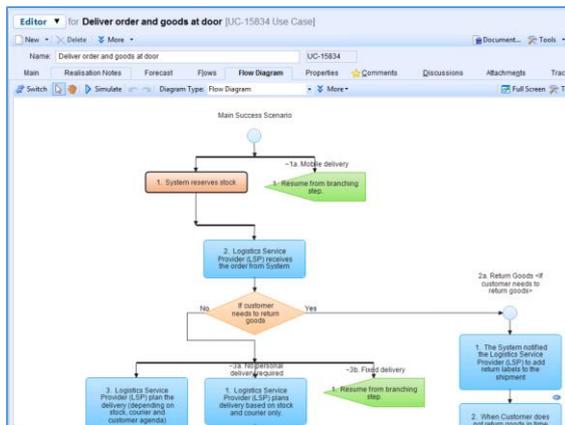
To manage the work, each business team has identified a set of features that needs to be provided by the new BSS-OSS system. This backlog of features is managed by a series of sprints in which the related specifications are going to be worked out.



Not just the features, also individual tasks and design review issues (special backlog items to ensure review findings are addressed and fixed) are managed towards a successful conclusion.

## Requirements and Use Cases

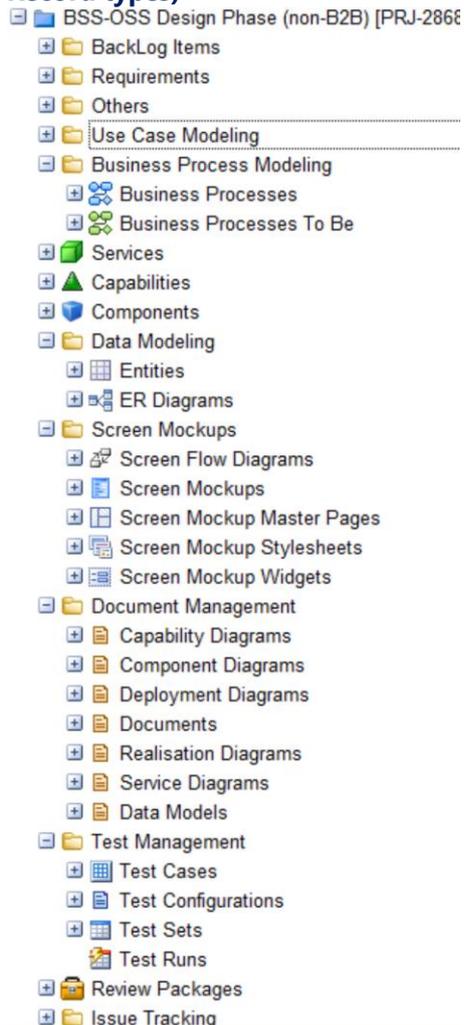
Starting point for the specifications of the new BSS-OSS system are Use Cases which reflect the typical needs of the organization. TopTeam's advanced Use Case and requirements editors allow to thoroughly document these Use Cases and relate them to business requirements and in a later stage to IT components and their detailed requirements.



## Document Management

Besides typical artefacts like Requirements, Use Cases, Entity Relationship Diagrams, Business Processes, etc. TopTeam also provides document management capabilities. This facilitates gathering useful and still valid documents that have been created in the past and manage these centrally in TopTeam. Another example is leveraging the power of external tools. One example is PlantUML, a tool which is used by the designers to generate extensive sequence diagrams based on scripting. TopTeam's document management allows to salvage these files as TopTeam artefacts and relate them to other artefacts within the TopTeam environment.

## Other artefacts (Screen Mockups, Data Modeling, Business Process Modeling, and Custom Record types)



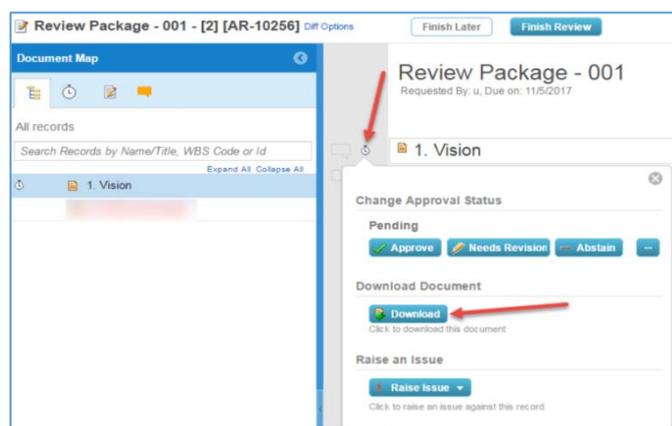
All in all, TopTeam integrates many different artefacts, all contributing to producing the specifications of the new BSS-OSS.

All these artefacts are related via trace links, allowing to compose an extensive set of specifications, which can be delivered to the suppliers developing the new BSS-OSS system.

Moreover, business and IT representatives of the newly formed organization and representatives from the suppliers are working closely together in the program, each adding their specific parts to the information in TopTeam, to ensure effective and successful delivery!

## Reviews and Approvals

The various artefacts, before being uploaded into the central BSS-OSS library, need to go through an approval lifecycle. This ensures the content of the library has the required quality level. Ready to review specifications are reviewed by key stakeholders and eventually approved. Depending on the situation, TopTeam review packages or generated documents are used to guide this review process and approve the artefacts.



## Issue Management

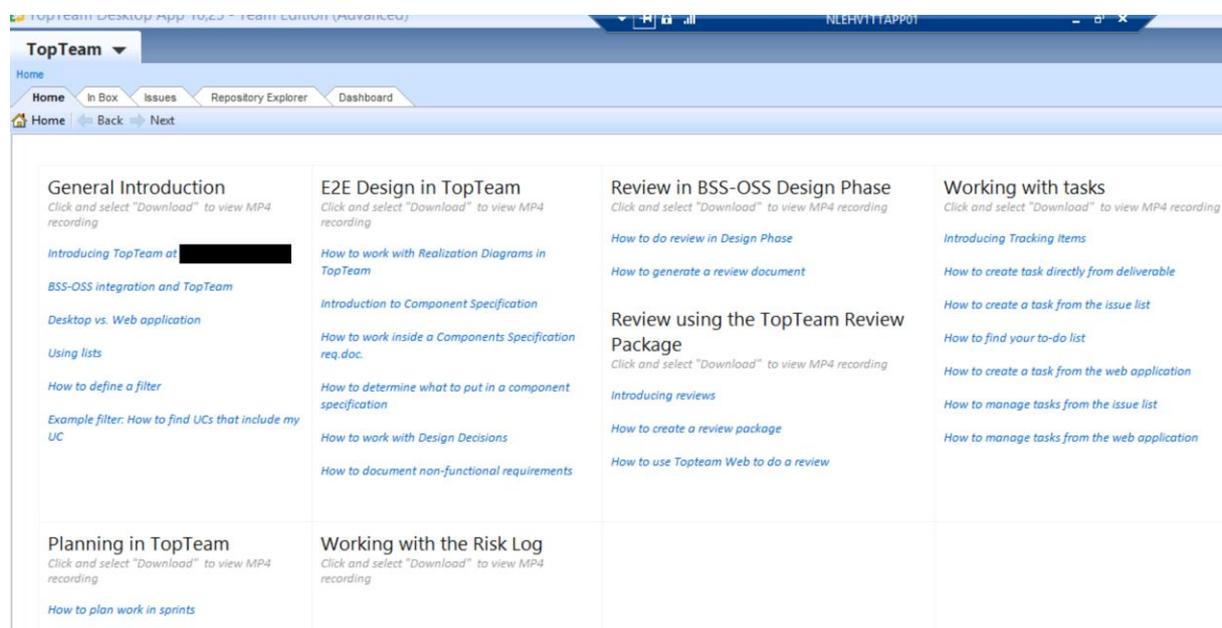
Besides the specifications of the new BSS-OSS, TopTeam also allows to integrally manage issues that may arise from e.g. the work or reviews. Examples are Design Review Issues and Gaps. Gaps are related to the existing applications which not yet fully support the needs of the new organization. These gaps need additional design and development work to ensure the applications are adapted accordingly. TopTeam keeps track of both the gaps as well as the work required to close them.

## Collaboration

When large teams are working together, a lot of communication is required. Much of these communications relate to the deliverables, to exchange ideas, to document and communicate decisions, to provide feedback. Traditionally, this is done via many different media: emails, chats, meetings, notes, etc. making it difficult to retrieve this information at a later stage. The people and teams in the BSS-OSS program communicate via TopTeam: comments and discussion threads, automatic notifications (also integrated with email), meeting minutes are all done within TopTeam and ensure all information is accessible to everyone involved. As a result, an extensive knowledge base is built.

## Training and Support

With over 100 people with different backgrounds working in TopTeam in a strategic program for the new organization, it is quite a challenge to quickly get people up-to-speed and have them all work in line with the design guidelines. To help people learn fast, a number of instruction movies have been created by Synergio which are directly accessible from the TopTeam home page. This approach facilitates learning-on-demand, allowing users to quickly learn about specific topics at a time and place which is convenient for them.



Additionally, the E2E designers are exploring the capabilities of the TopTeam Process Designer, which facilitates an integrated process guidance directly accessible from TopTeam, combining working process guidelines with actual TopTeam functions to document the information while working.

Last but not least, with such a large group of users, quite a few TopTeam related service requests are issued every day. A specific tracking item, called "TT service request" was created allowing people to ask for support from within TopTeam. The service requests are sent to the functional support team which then follows up.

## Competitive edge – Agile and Stage Gates live happily together

Taking this Agile business analysis approach for the program enabled defining a single BSS-OSS application landscape in record time. In addition, the business-as-usual projects were able to maintain their traditional approach to business analysis, following a stage gated process where business analysis is done before going into feasibility.



The ability of TopTeam to support both an Agile as well as a traditional approach to business analysis, provides a growth scenario to go step-by-step from a traditional way of working to a (scaled) Agile way of working, providing the company maximum flexibility in defining new business value.

The extremely advanced way of managing the BSS-OSS program, utilizing TopTeam to the max, makes this telecommunications' company very competitive in their ability to define and support new business initiatives and respond to business and technology change. As a result, it serves as an excellent example for large and complex projects in the telco market.