Safran Risk

Safran Risk: The very best in Risk Reporting
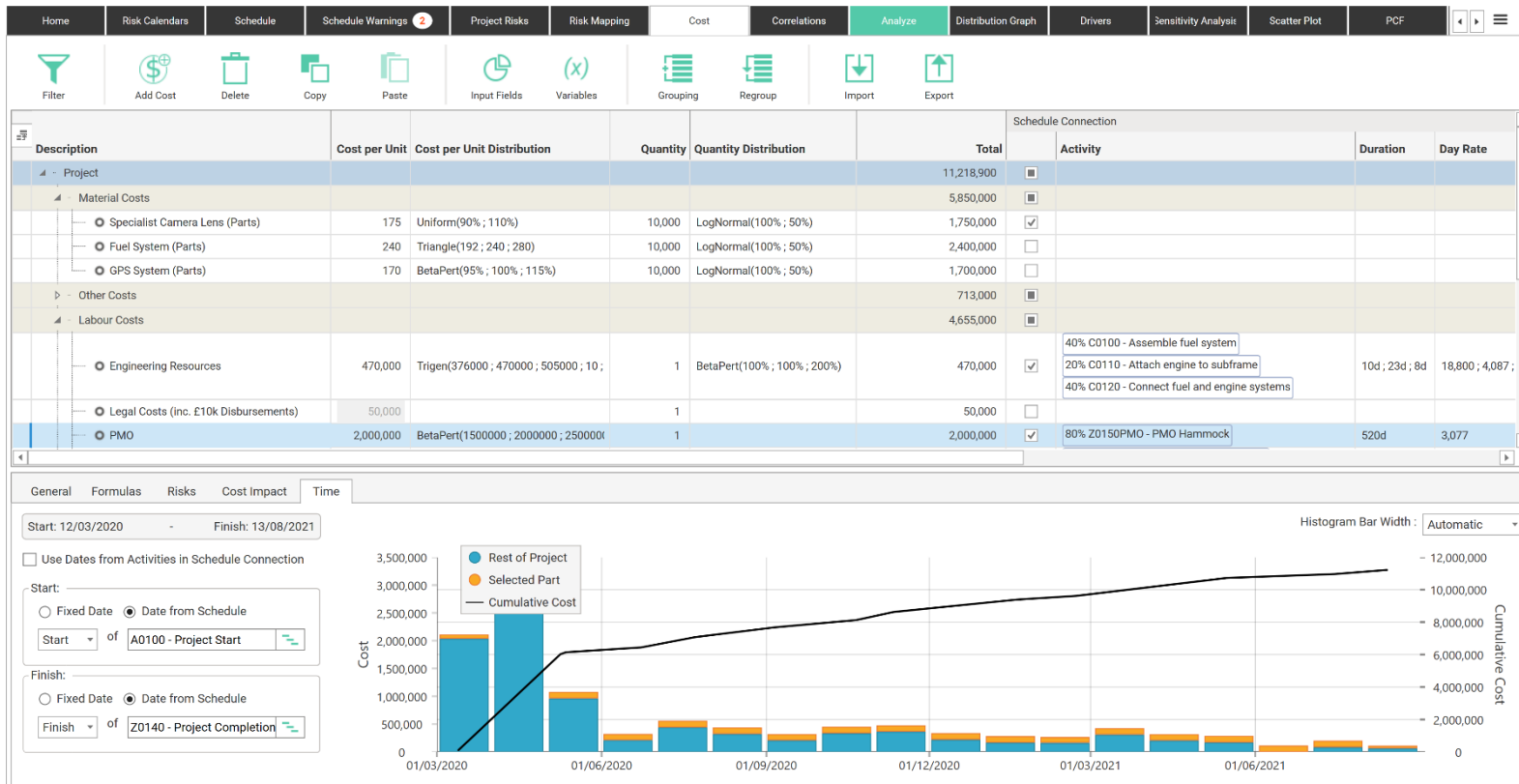
Safran **Risk** report examples that help you make project risk analysis a more transparent process for all

Fully Integrated, Time-phased, Schedule and Cost Risk Analysis

Safran Risk is one tool that can be used right from the project discovery, identification, or bid phase to perform a cost only risk analysis all the way through planning, execution and closeout.

This cost risk information can easily be incorporated with schedule information to create a powerful integrated schedule and cost risk model that builds on the team's existing knowledge and understanding, without the need for complicated resource loading of the schedule.

One of the biggest benefits of this approach is the time saved as a direct result of not having to 'translate' all the cost information into a format the schedule can understand. In addition to being a a time-consuming process, it also carries with it a high margin for error.

Simple, Powerful Risk Mappings with Real-time Analyzer

Risk mapping is an important step in any risk management process. This process can often take place as part of, but is not restricted to, regular risk workshops.

Risk Mapping is a useful way to see and discuss the risks within the team and identify the best scenarios for mitigating or eliminating the risks.

One powerful, unique feature of Safran Risk is the real-time distribution calculator that can be seen in the bottom right of the screenshot.

As you assign risks to activities this will automatically calculate an approximation of the combined impact of all the risks on that activity.
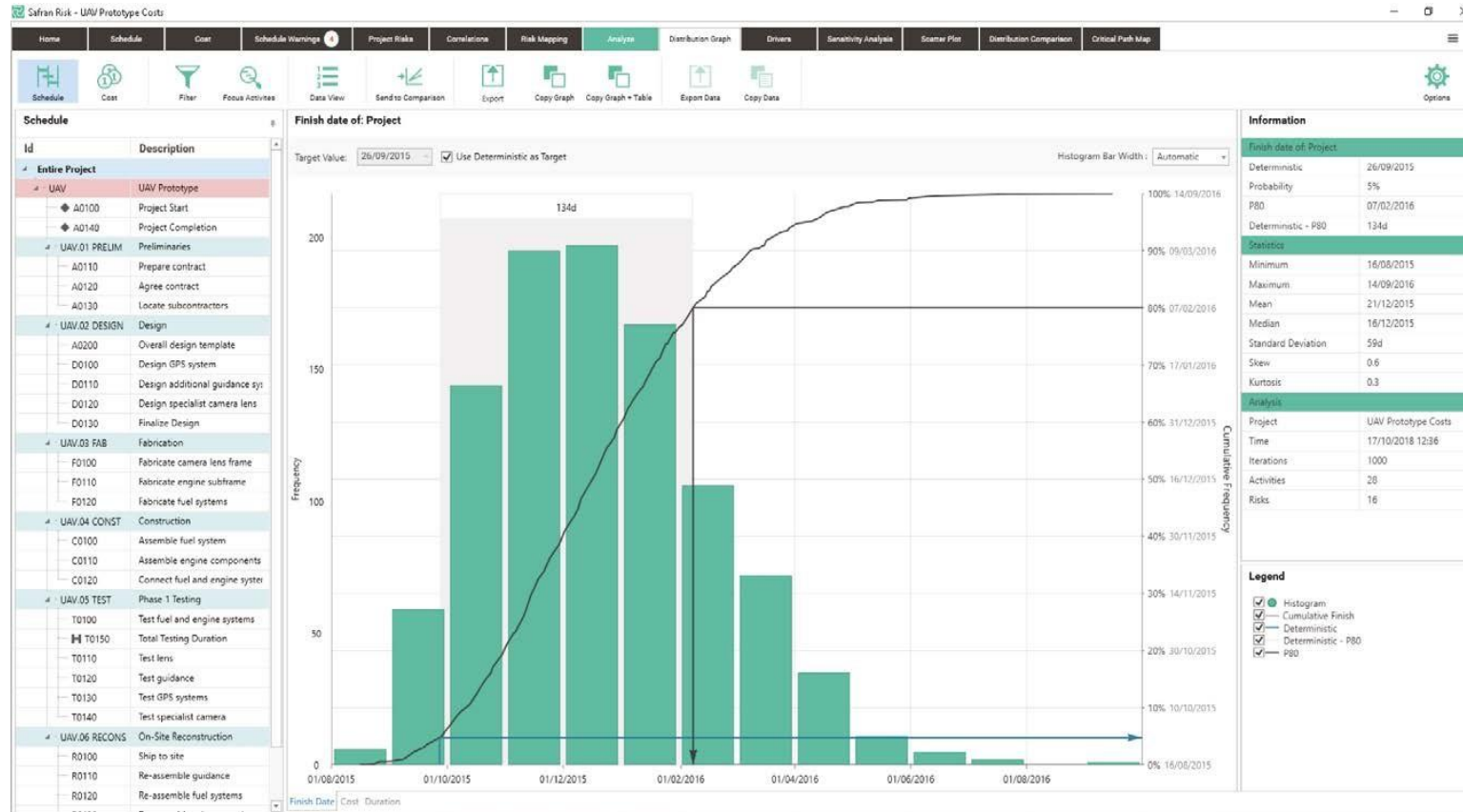
Standard Distribution Graphs for Schedule...

When you run the risk analysis, Safran automatically generates a Risk Histogram for finish date, duration and cost.
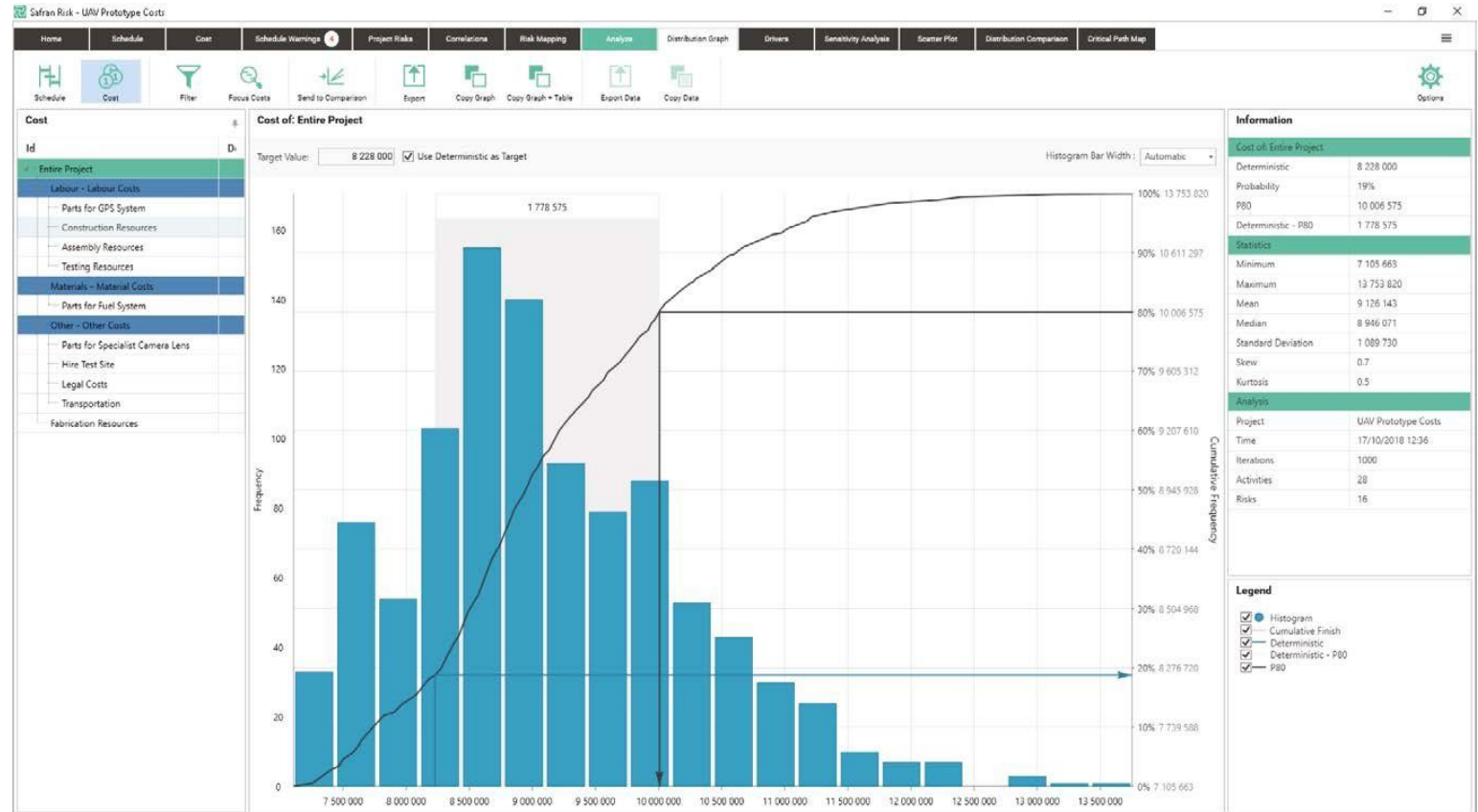
The Distribution Graph is by default displayed for the entire project; however, you may choose to see the results for an individual activity, summary or key milestone.
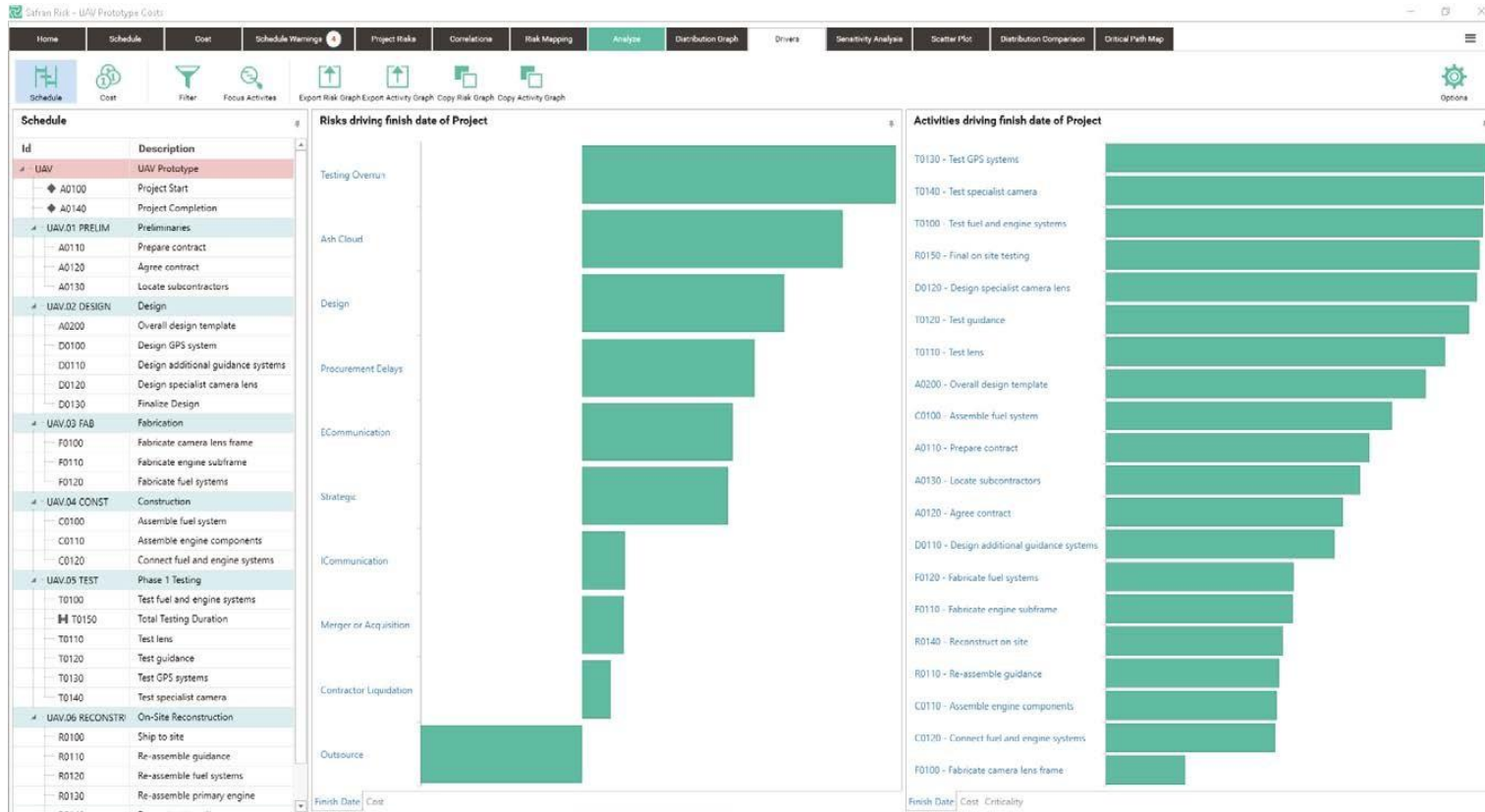
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...and Cost

The Cost Distribution histogram can show results for the entire project or any individual element of the Cost Breakdown Structure.

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Tornados showing risks and activities driving Project or Milestone Finish Dates

Safran Risk provides a list of project finish and project cost risk drivers on the left-hand side and activity project finish and cost drivers on the right-hand side.

The risk drivers are ranked by those risks that, during the simulations, were most tightly correlated to either delays in the project finish or overspends in the project cost.

Similarly, the activity drivers are ranked by those activities that, during the simulations, were most tightly correlated to either delays in the project finish or overspends in the project cost.

Consistent across all the Safran Risk reports is the ability to view these results for the entire project, key milestones or any individual activity.

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## Tornados showing all Project or Milestone Cost drivers

When used to analyse a fully integrated cost and schedule risk model Safran Risk can uniquely provide information on exactly what is driving the costs, whether it's:

• Cost Uncertainty

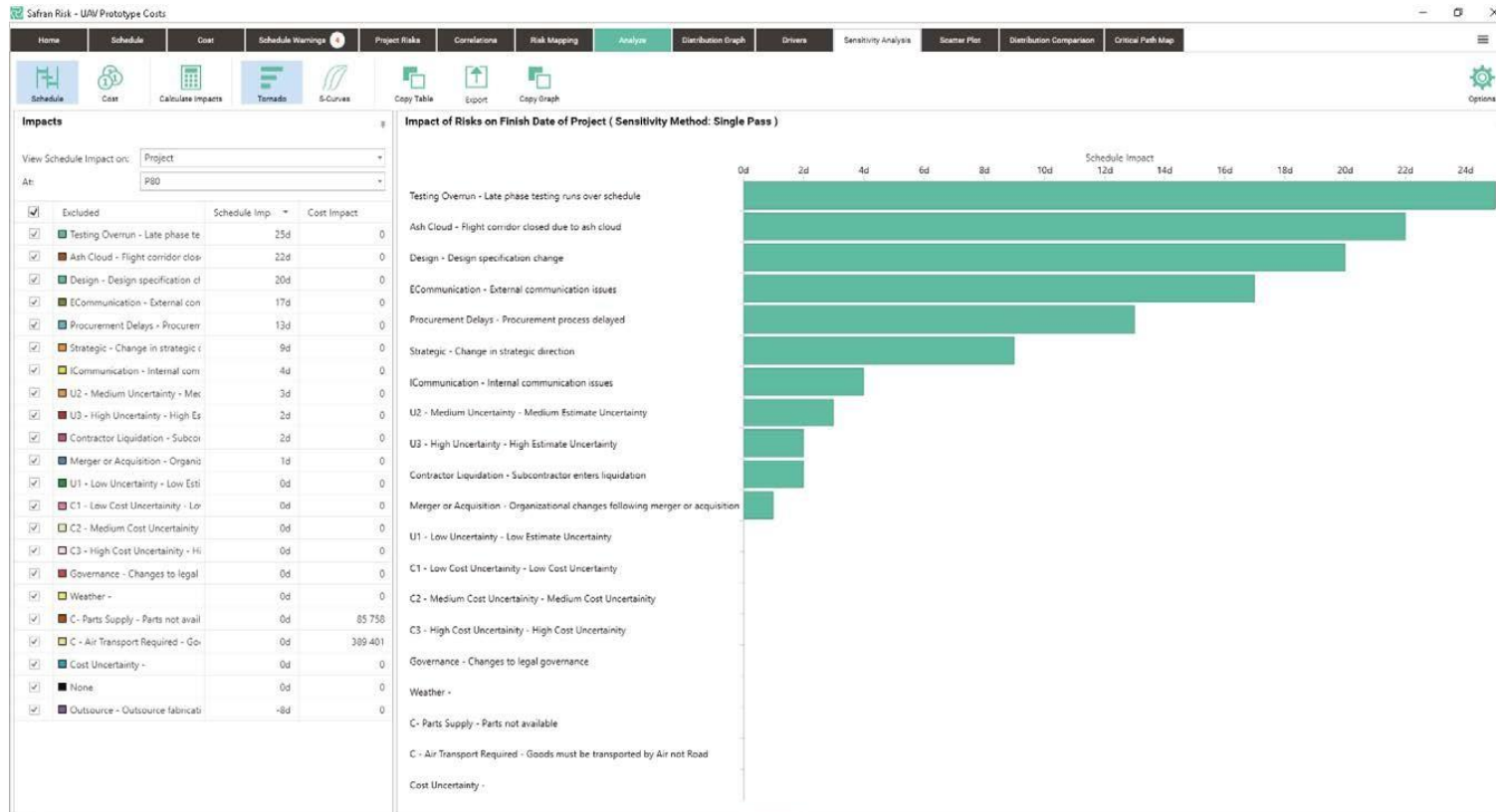• Risks impacting the cost directly

• Schedule Uncertainty

• Risks impacting the schedule

The resulting tornado combines all this information in one easy to understand report.
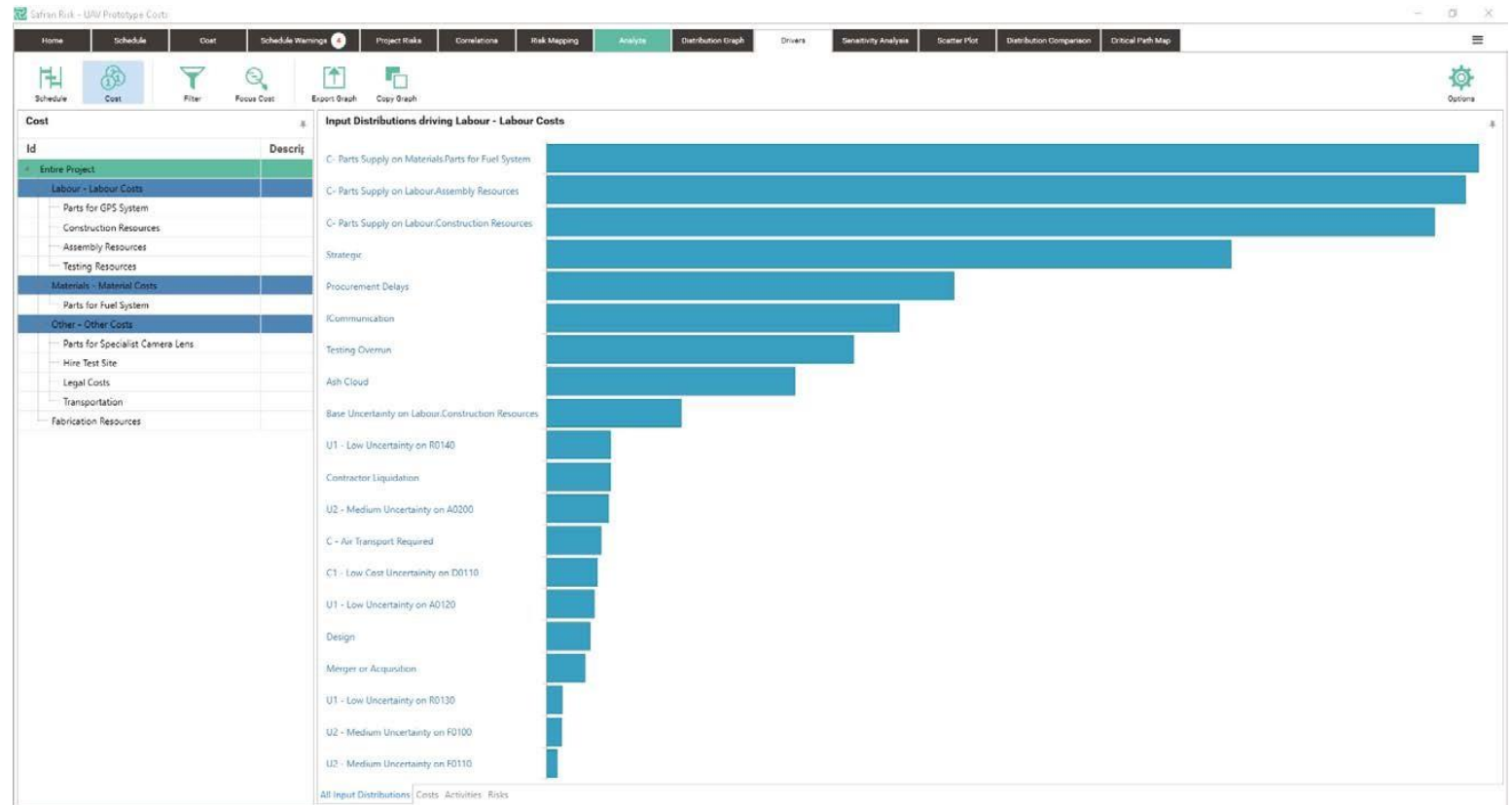
Schedule Sensitivity Analysis shows risk driver impact in days

Sensitivity Analysis provides you with detailed information on precisely how much of an effect your risks have in terms of days as seen in the graph adjacent.

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## Cost Sensitivity Analysis shows risk driver impact in real monetary terms

Sensitivity Analysis can also be used to deliver data regarding cost units, which can then be translated to show monetary impact.

By combining these two data sets (impact in days and impact in monetary terms) you are able to more accurately assess a preferred mitigation strategy, and this information is also available for any chosen percentile(s).
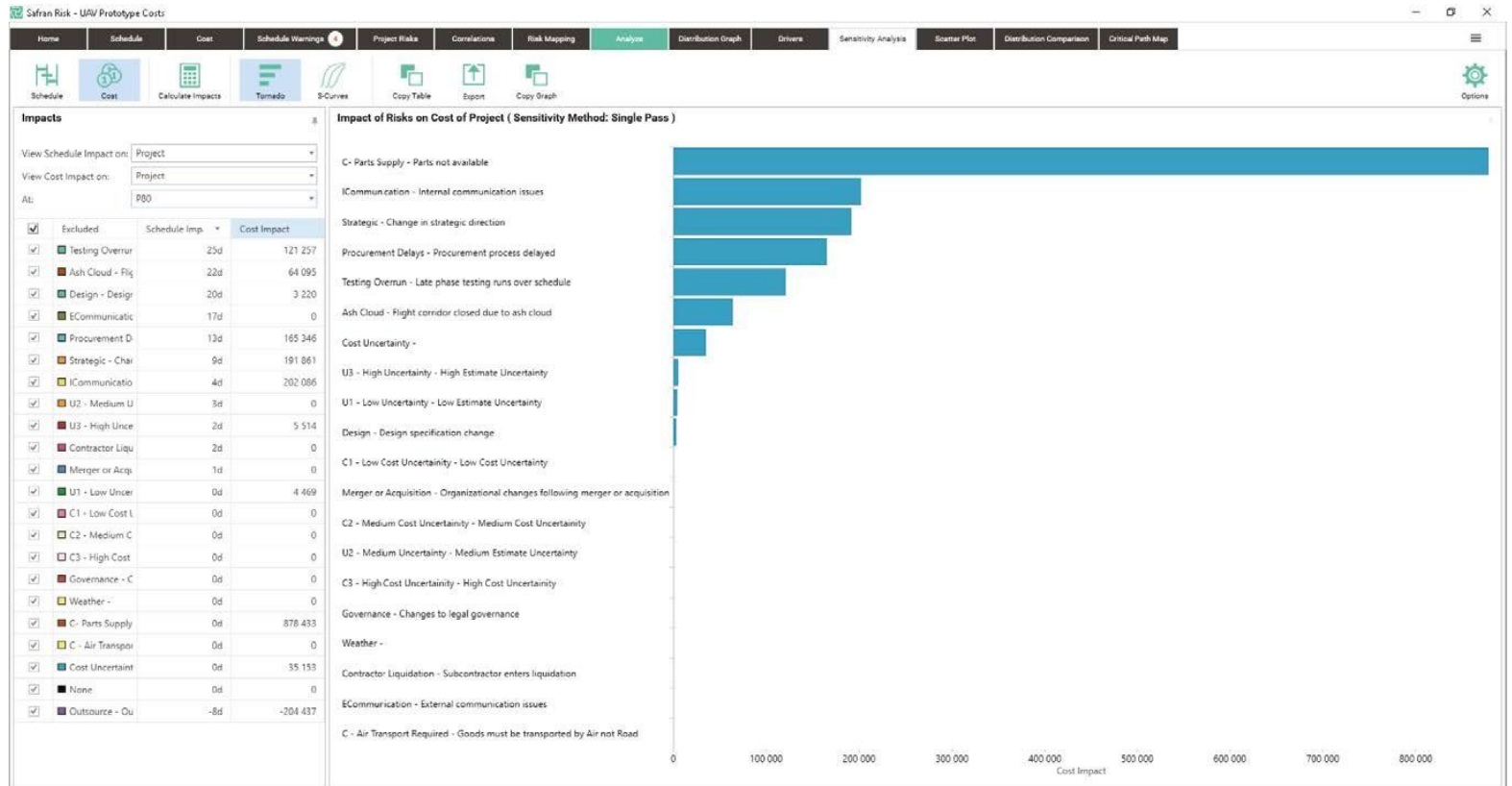
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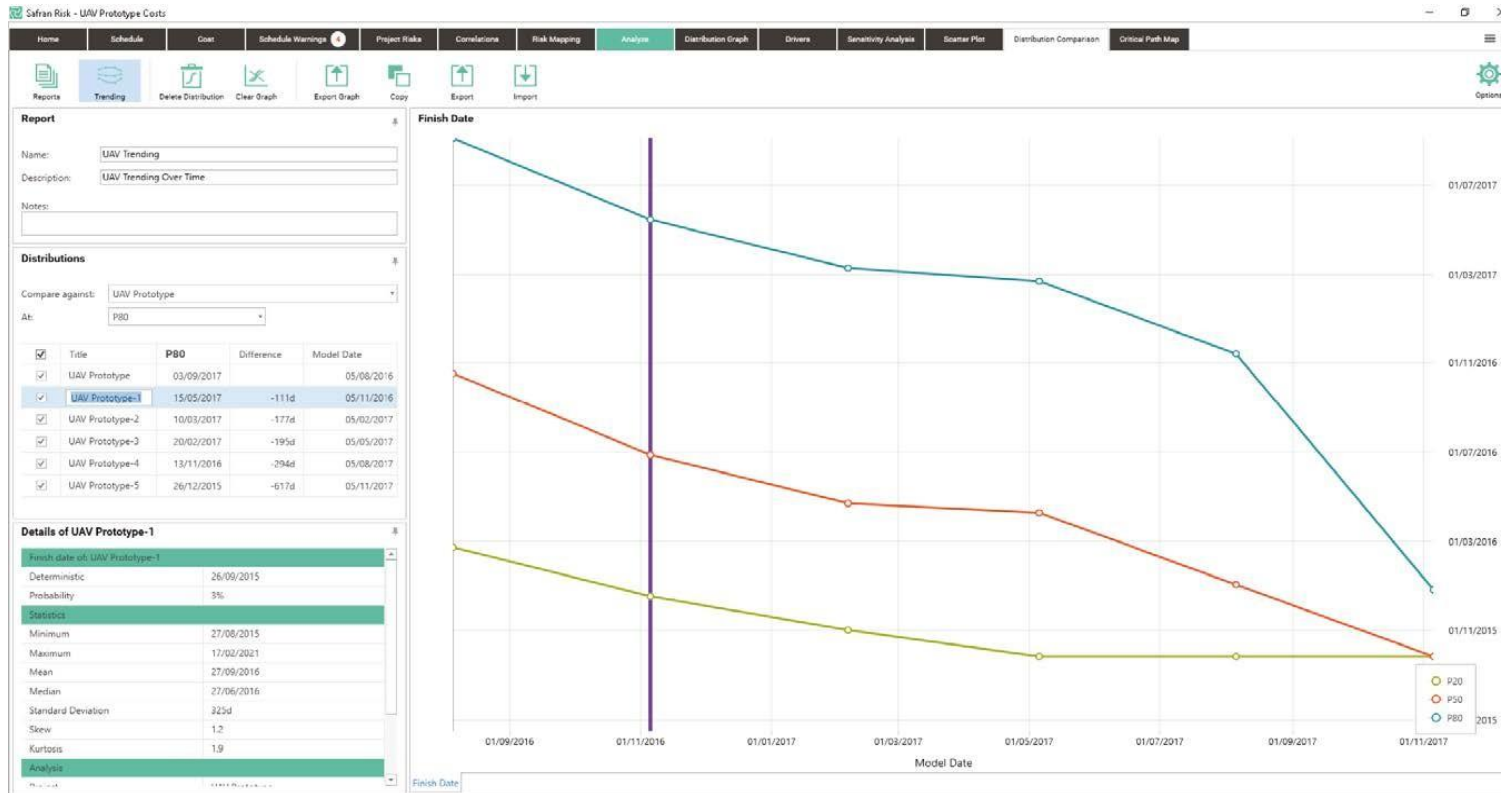
Trending over time reports to track progress over multiple review stages

The Distribution Comparison in Safran Risk can be used in two modes.

The first allows for any combination of distributions from any of your projects to be compared and is often used to compare pre and post mitigated scenarios.

The second, and unique, mode allows you to see how the risk analysis results have changed over time. This trending report is particularly useful in describing whether the uncertainty / risk in a project is increasing or decreasing over the project lifecycle.

Scatter Plot shows the combined Schedule and Cost confidence level

In the Scatter Plot you can compare two distributions and see how they're correlated to each other.

You can also see the Joint Confidence Level (JCL) for a combination of two values. E.g: What's the probability of finishing before date x and below cost y?

The plot visualizes each iteration as a dot, with its position determined by the two values that you choose.

The picture adjacent shows the default setup of the Scatter Plot. In it we're comparing the project finish date (on the x axis) and the project cost (on the y axis).
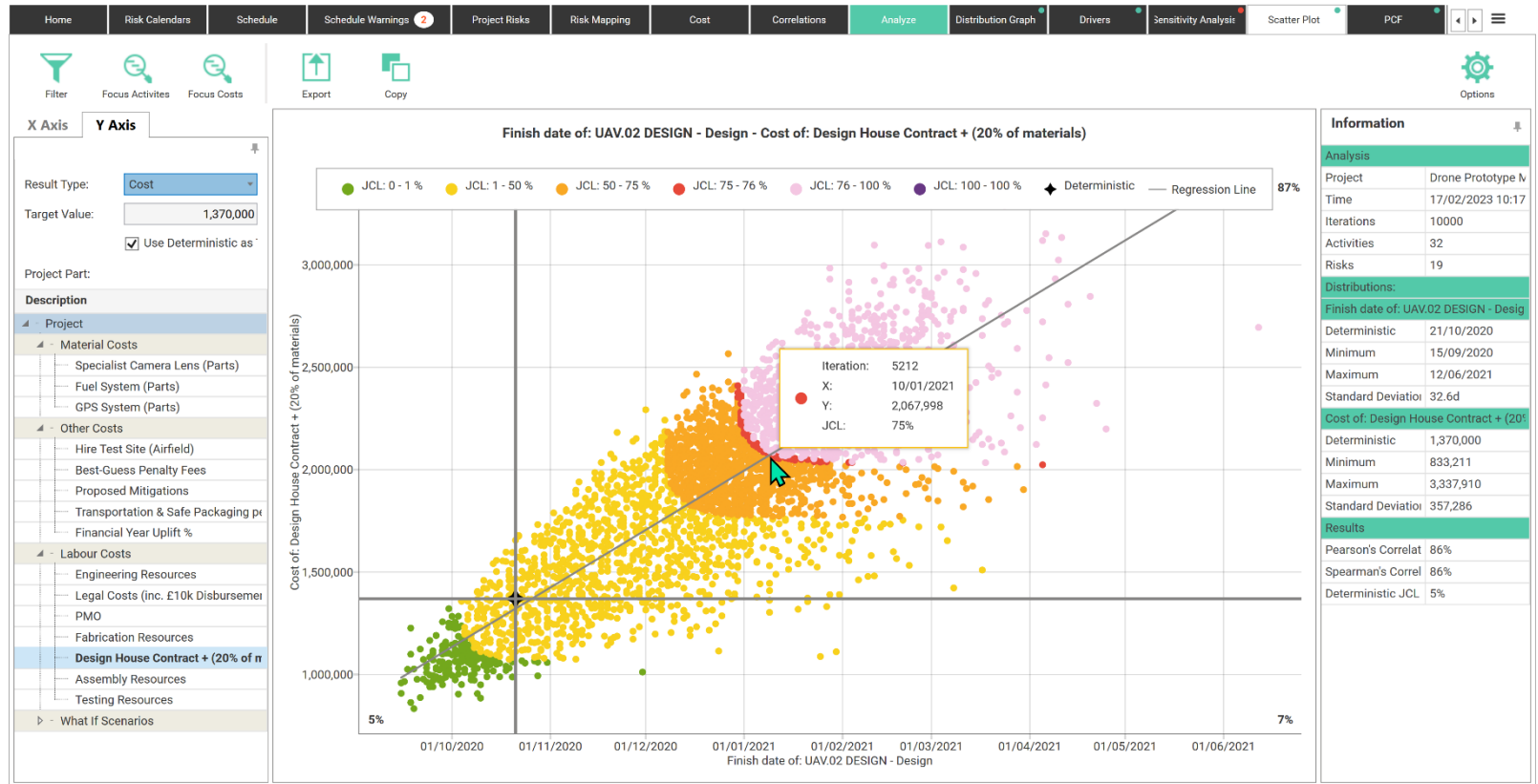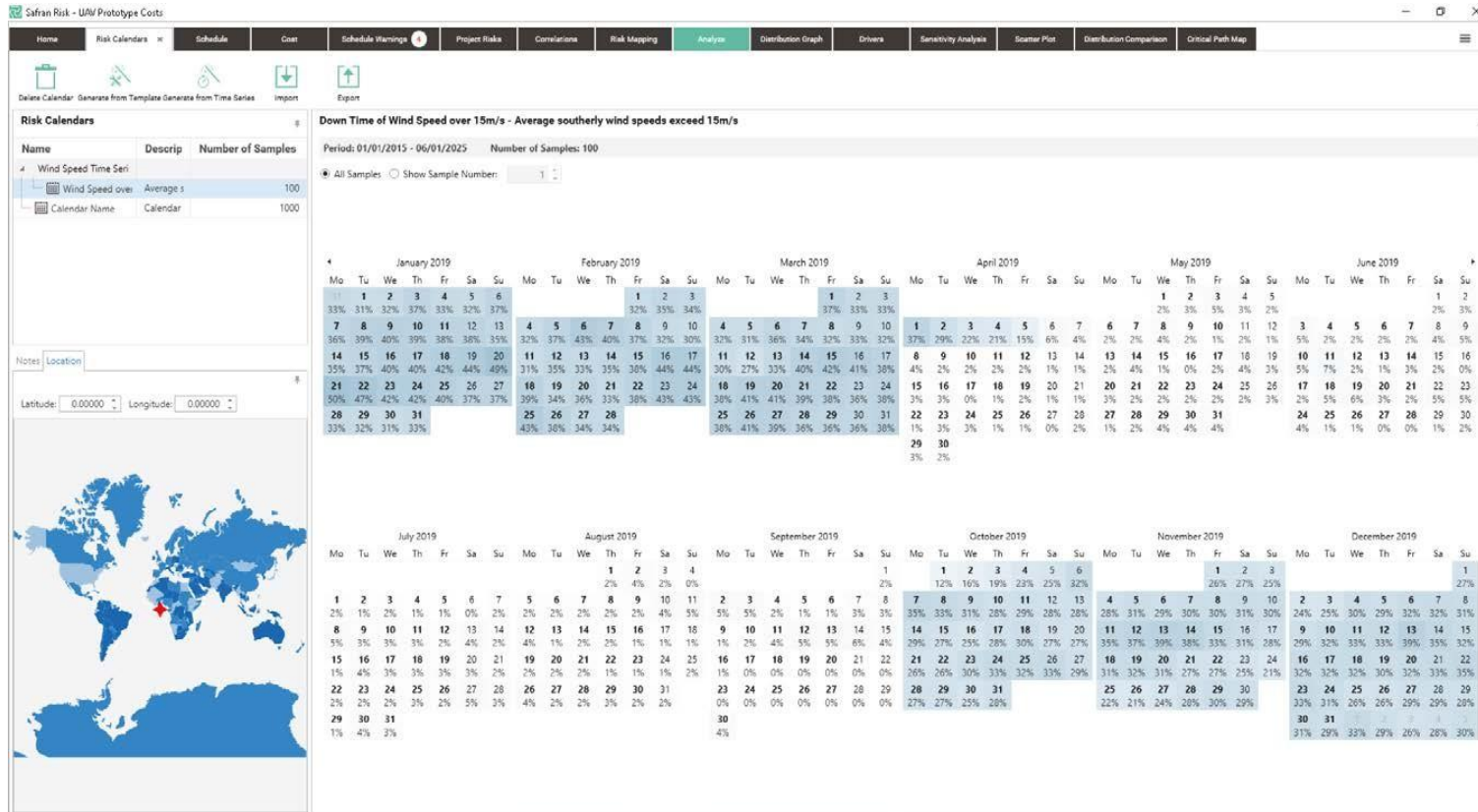

As you can see on this specific example, the green markers in the lower left corner show that there is only a 3% chance of finishing before deterministic date and below the deterministic cost.

The red markers on the top right corner show that that there is a 79% chance of both being late and over budget.

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Risk Calendars can be generated from real world time-series data

The Risk Calendar functionality in Safran Risk offers a powerful way to model those risks which result in a variable amount of calendar downtime.

Safran Risk is the only tool on the market that allows you to provide this information using real time- series data on a given geographic location.

Using real historical data to forecast the likelihood of any future downtime helps combat one of the biggest criticism of risk analysis.

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Safran is the preferred software provider for project control professionals around the world who need to manage complexities with ease.

Whether you run time-critical, asset-intensive, resource constrained capital projects, or high-risk research and development projects, Safran design smart solutions that enable you make the best decisions and ensure you deliver on time, and on budget.

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