



## Navigating an Excel Maze

**Tessella was asked to look at a key spreadsheet used to prepare financial forecasts according to real-life data. The spreadsheet in question had some deficiencies both in its internal consistency, and in immediate suitability to the customer's needs.**

### Business Problem

Critically, the layout and sheer volume of information contained made the spreadsheet difficult to follow, and intimidating to new users.

In addition, standard changes in real-life data – for example, in the characteristics of an individual power station - had to be manually cascaded to multiple areas of the spreadsheet, injecting a real danger of simple errors that could skew final estimates.

Such errors could also arise during a standard, multiple cut-and-paste operation when extracting the final estimates from the latest data - a tedious task which might be repeated up to 10 times a day.

### Tessella Solution

Using our existing expertise of the energy trading industry, as well as in-depth knowledge of the full power of Excel VBA, Tessella implemented a 'database-like' solution within the spreadsheet. This ensured that lists of key data were managed centrally, while keeping the application in an environment that users could readily understand.

Instead of having to navigate large areas of complex, interwoven data, the user could now use a small set of dropdown menus to quickly identify their current area of interest – for example, employment-related data for stations of a certain type only. Relevant data would be extracted and presented in an easy-to-edit format.



Ease of use was further heightened by the addition of features such as:

- Filtering the entire spreadsheet by 'importance level'
- Change tracking
- On-line help
- One-click access to key variables

To cut down on errors, as well as save time, easy-to-follow forms were added that let the user cascade changes to core data to the entire spreadsheet. In addition, automated updating of certain data according to information from external websites was added.

Generation of the final output data, and its export to other spreadsheets, was also automated, a feature that immediately made an impact on the workload of key users.

Tessella recognised the criticality of 'future-proofing' the new functionality – the spreadsheet itself would inevitably evolve over time, and so almost all new areas were designed to be readily configured by the spreadsheet owner, maximising flexibility.

## Results and Benefits

The new version of the spreadsheet was deemed significantly easier to use, enabling the key user to delegate more work to the entire team, as well as to have more confidence that the data was both accurate and up-to-date.

**Tessella plc** 26 The Quadrant, Abingdon Science Park, Abingdon, Oxfordshire OX14 3YS, UK  
T: +44 (0)1235 555511 | F: +44 (0)1235 553301 | E: [info@tessella.com](mailto:info@tessella.com)

**Tessella Inc** 233 Needham Street, Suite 300, Newton, MA 02464, USA  
T: 1 617 454 1220 | F: 1 617 454 1001 | E: [info@tessella.com](mailto:info@tessella.com)

**Tessella – successfully delivering IT and consulting services to world leaders in R&D, science and engineering.**

For decades, Tessella has been successfully delivering IT and consulting services to world leaders in R&D, science, and engineering. Through the application of scientific methods and rigorous quality procedures, we enable clients in life sciences, energy, the public sector, and consumer industries to achieve a wide range of objectives, including, forecasting floods, developing fusion power, enhancing military sensor capability, increasing drug discovery and development efficiency, and reducing risk to health and the environment in the extraction and production of oil and gas. With offices in Europe and North America, global companies rely on Tessella for business critical assignments.

Copyright © Tessella plc 2009, all trademarks acknowledged.

