ZEUS, developed by NeuroPie Solutions, is the leading software for operational airport management. The software offers a real-time overview of all processes at an airport, thereby improving process quality, performance and punctuality. ZEUS stands for ongoing innovation and has initiated a paradigm shift in the field of business intelligence. On a practical level, the software is easy to use and offers short implementation times. It expands the scope of company-wide information in a data warehouse by supporting a dynamic, multilateral decision-making process.

In contrast to traditional process-control systems, ZEUS offers a comprehensive overview of all processes. While enterprise resource planning systems rely on specific processes and sub-steps, ZEUS is service orientated and can be flexibly adapted to changing requirements. It sets new standards in data visualisation, a feature that has only been implemented rather abstractly until now. By highlighting critical situations, ZEUS improves clarity and thus facilitates high-quality decision making. ZEUS’s focus is on the key drivers of punctuality, service quality and continuous improvement.

ZEUS monitors and visualises all airport processes in real time, boosting process quality, enhancing performance and improving the punctuality of the services provided. It offers an insight into key processes such as passenger flow, baggage sorting, security control, check-in and car park capacity use. ZEUS provides users in their different roles everywhere at the airport with the information they need to take faster and better-targeted decisions.

Decisions are taken on the basis of real-time information available to all parties involved, taking all sub-processes into account. In the event of irregularities the software’s event management communicates information in concentrated form and displays it in an easy-to-interpret format. This means unbiased transparency and quick access for monitoring central business processes. Applying state-of-the-art technologies, ZEUS delivers action-relevant and dependable results to all stakeholders in the value chain.

**SITUATION VISUALISATION** Most of today’s airport systems display information in the form of tables or bar charts. In more advanced systems the user can sort and filter the information displayed, and sometimes colour coding is used to highlight certain information. However bar charts and tables have a common weakness: the overview they offer diminishes once the amount of information exceeds a certain level. Whenever it is necessary to scroll in order to visualise all the data, information that is currently not displayed on screen is likely to be neglected.

Real-time updates on critical elements of airport-wide operation are provided in an easy-to-read cartographic overview. This enables quick access to key business issues, enabling the user to monitor airport operations and increase the speed and accuracy of the decision-making process.

Users often complain that applications with an information overload make it impossible to distinguish between important and unimportant information. Eventually users simply ignore all the alerts because there are just too many to deal with. ZEUS’s rule-based event management liberates users from data bombardment and allows them to remain proactive and respond to critical alerts.

Furthermore ZEUS’s latest addition, the Value Chain Dashboard, offers an at-a-
glance overview of the process quality of all relevant process partners. Here the objective is to highlight actual areas of concern and ensure clear and concise reporting on process performance to all relevant stakeholders, based on a set of tailor-made performance indicators.

The characteristic of any operations control centre is a battery of IT screens providing the information needed to efficiently control or steer whatever has to be controlled or steered. This usually impressive array of different-sized screens easily surpasses what you would find at Houston

Control. But while in Houston there are plenty of staff to monitor what is being displayed on these screens, in an ordinary operations control centre the user is usually a lone fighter endeavouring to follow multiple screens simultaneously to keep track of what is going on. This task is made all the more difficult by the fact that, for every screen, a dedicated keyboard has to be used to search for more information on the different displays. ZEUS offers a detailed insight, geared to the user’s individual needs, into key processes such as passenger flow, baggage sorting, security queues and car parking – all in one system and at the click of a mouse.

**PERFORMANCE MANAGEMENT** Airports are primarily rated according to their punctuality, but this ignores the fact that the damage caused by delaying a full Boeing 747 is much greater than with a small, almost empty, commuter plane. To take such differences into account, ZEUS employs the concept of Total Performance Management with new best-practice key performance indicators. The Punctuality Cockpit makes the effect of delays clear and enables responsibility to be assigned to the correct source.

Together with a comprehensive set of live reports, ZEUS delivers a real-time picture of the information collected by the software’s monitoring components. These reports enable the management to quickly assess the quality, production, revenue, use and performance of an airport. The interpretation of graphical reports is facilitated through the addition of qualitative comments regarding irregularities, in anticipation of questions such as “Why is this curve at such a low level?”

ZEUS can be quickly installed and seamlessly integrated with any airport system such as AODB, RMS, Ground Radar, Baggage Sorting, IRVR and others. The data integration supports a service orientated architecture and is based on standardised Web services to supplement existing integration platforms.