

## Conference Abstracts:

### C2 Best Practices Integrated SPO/SPE Project Deployment & Execution for Major Global Projects

Speaker: Phil Wright, Project Engineering Services Manager , WorleyParsons Europe Ltd.

Abstract: WorleyParsons Europe Ltd is currently executing contracts on some of the largest hydrocarbon projects in the world today. Management of global mega projects is a complex task, particularly in the execution phase with work being undertaken in various globally dispersed locations, by multiple EPC contractors, equipment and material suppliers, design institutes and owner organisations.

Add to this an additional client requirement to adopt a “data centric” approach to information management, utilising fully integrated intelligent applications, with a central data warehouse residing in a location accessible by all, and you have the outline of the challenge we are tackling in London.

This presentation will explain the nature of the challenge, requirements for a solution, how the solution was implemented, the resistance we encountered from engineering personnel and the business benefits that are expected from the implementation of Smartplant Enterprise throughout the life of a project.

### 01 Reducing Costs and Risks in CAPEX Projects with Improved Project Execution Processes

Speaker: Adrian Park, Global Executive Director, Owner Operator Solutions, Intergraph

CAPEX projects in the process industry typically overrun project budget by 20-30% and delays to plant start-up are frequent. In this session, you will be shown how project management contractors and owner operator project teams can achieve improvements in managing key work processes including: managing project change, interface management, non-conformity management and technical query management to reduce the risk of escalating costs and delays on projects. Intergraph's template solution for project execution processes enables fast, low-risk implementation of these integrated project execution processes into projects.

### 02 Mastering Interface Management on Complex Mega Projects

Speaker: Phil Wright, Project Engineering Services Manager , WorleyParsons Europe Ltd.

Abstract: WorleyParsons Europe Ltd., is currently executing contracts on some of the largest hydrocarbon development projects in the world today. Managing project interfaces is highly complex, particularly in the execution phase with multiple EPC contractors, package equipment suppliers, design institutes, and owner organizations interfacing on a daily basis. For example, on a mega project, the total number of interface points may exceed 100,000. If these are not managed correctly, they have the potential to significantly impact a project's overall cost.

In this presentation, the speaker will explain the nature of the challenge, requirements for a solution, and the business benefits expected from the implementation of the SPO Interface Management business package to provide an overall interface management solution throughout the life of a project.

### 03 Title: SmartPlant Enterprise for Owner Operators: Improving Plant Efficiency, Reliability and Reducing OPEX Costs

Speaker: Adrian Park, Global Executive Director, Owner Operator Solutions, Intergraph

Seconds count when responding to plant incidents. Providing plant floor workers and engineers with quick and easy access to essential plant engineering information together with data from other operations systems such as DCS and maintenance systems can make a major difference in supporting the critical decision-making processes. SmartPlant Enterprise for Owner Operators (SPO) provides a ready-made solution for rapid implementation to support operations and maintenance activities for Greenfield and Brownfield plants. In this session, you will be shown how SPO manages key processes for the operations phase of the plant lifecycle, including: supporting troubleshooting activities; managing plant design changes to provide auditable compliance with authority requirements; preparing and validating data for loading into maintenance systems then ensuring the maintenance system is kept in line with changes to the engineering design basis; and improved planning of the complex, laborious turnaround planning process.

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## 04 Smart Plant Construction - Bringing it all together

Speaker: Johan Kroon, Intergraph EMIA Consultancy Manager, SPMaterials

"In order that we can deliver today's large and complex projects on time and on budget, Construction Management and the planning of construction is crucial to ensure success. During the construction phase it is vital that we have access to the latest information in relation to documents, drawings, materials availability and schedule requirements.

This diverse information needs to be easily accessible to ensure decisions can be made to ensure the efficient sequencing of the works. Smart Plant Construction allows us to then verify that the latest drawings are allocated to Work packages, check the materials are available and integrate the schedule requirements with the 3D model allowing us to visualise what we've planned in a 4D & 5D animation."

## 05 Safety in the Engineering Enterprise

Speaker: Frank Joop, Technical Director, Intergraph Corp.

Building and operating a plant safely is essential for the business, environment, personnel, and business image. SmartPlant can assist in making the right decisions early in the design phase to accomplish corporate safety goals. In this session, you will learn how SmartPlant rules and capabilities can help you make safe design decisions, assessing risks through HAZOP studies and making sure the plant will operate under safe conditions while keeping costs and schedules as planned. The speaker will discuss area classification designs and how to check for under-classified equipment items in those zones. The safety aspects we will cover include process safety, personal safety, facility safety, and environmental safety for your facility. Join this session and learn how to design safety into your plant.

## 06 SmartPlant Foundation use on Neste Oil Singapore and Rotterdam plants

Speaker: Markku Eerikäinen, Intergraph EMIA Consultancy Manager, Neste Jacobs

Neste Oil on rakentanut uusiutuviesta raaka-aineista dieseliä valmistavat laitokset Singaporeen ja Rotterdamiin. Laitoksilla käytetään SmartPlant Foundation-järjestelmää sekä laitosten senhetkistä tilaa kuvaavien dokumenttien hallintaan että niiden ylläpitoon liittyvään tiedonhallintaan. Osa ylläpidettävistä dokumenteista tuotetaan projektin toteuttajan Neste Oilille luovuttamista suunnittelujärjestelmistä ja osaa ylläpidetään tiedostoina. Esitelmässä käydään läpi järjestelmän toiminnallisuuden nykytila sekä joitakin mahdollisia tulevaisuuden visioita.

## E1 Engineering and Schematics in Solutions: Now and Next in Productivity

Speaker: Frank Joop, Technical Director, Intergraph Corp.

Smart Engineering – come and see what is new and what has been planned for Intergraph Schematic Products. SmartPlant piping and instrumentation diagram (P&ID), SmartPlant Electrical and Sigraph are just some of the products that will be covered in this session. See how Intergraph has developed some very efficient and effective new functionalities that have provided incredible new design capabilities. These capabilities will allow you to enhance your productivity both in design and operations with quality, consistency and expanded scope coverage.

## E2 Engineering and Schematics in Operations

Speaker: Frank Joop, Technical Director, Intergraph Corp.

The operation of a plant involves making the right decision fast. To do this, you need to be informed with the right engineering data on demand. SmartPlant Engineering and Schematics solutions support the lifecycle of the plant, from the creation of a consistent set of high-quality safe engineering designs to accessing and presenting that information to help you make the right decisions in operations and maintenance activities. In this session, you will see examples of Intergraph solutions in design through to operations and maintenance.

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## E3 Extended SmartPlant Electrical Solutions

Speaker: Frank Joop, Technical Director, Intergraph Corp.

In this session, you will see the extended electrical solution that shows the coverage of the complete electrical scope from the basic engineering and design validation with ETAP to the detailed design such as panel layouts and 3-Line diagrams. This not only provides the complete electrical scope offering, but through integration with the SmartPlant Enterprise rules and workflow change management with other disciplines, you will see a powerful and unique solution that provides productivity, consistent design and documentation.

## E4 SP3D Product update

Speaker: David Whittle, Business Development Manager – EMIA SmartPlant 3D and Layout, Intergraph UK

Intergraph Smart 3D solutions have added significant new features designed specifically to increase productivity and enhance performance. Intergraph experts will discuss the business and technical benefits of the new features released this year. Learn how you can improve your engineering designs and take full advantage of the latest Smart 3D software.

## E5 Smartplant Foundation ja integraatio – lisää tuottavuutta

Speaker: Seppo Turunen, Senior Consult, Intergraph

SmartPlant Foundation on keskeinen tuote toteutettaessa järjestelmien välinen integraatio. Esityksessä tutustutaan ohjelmiston tarjoamiin teknologioihin suunnittelu-, yritys- (EAI) sekä liiketoimintakumppanisovellusten (B2B) kytkemiseksi tukemaan yrityksen liiketoimintaprosesseja.

## E6 Smart Plant Materials - The latest developments

Speaker: Johan Kroon, Intergraph EMIA Consultancy Manager, SPMaterials

“This session will focus on the place Smart Plant Reference data and Materials have within the Smart Plant Enterprise as well as the latest development in both these like SPRD plus and Subcontracting.”

## E7 CAESAR II overview and future Integration with Smart 3D

Speaker: William Rasco, Global Sales Manager CADWorx & Analysis Solutions, Intergraph Process, Power & Marine

Abstract: Intergraph's CAESAR II is the industry's leading Pipe Stress analysis product. It is a very robust, user friendly program with a graphical user interface. However one of the biggest bottlenecks that persist in piping design is the exchange of data between the design and engineering models, as models typically must be rebuilt in one software application to reflect changes initiated in the other. The current process may consume many of the pipe stress engineer's scarce hours, provides ample opportunity for modeling errors, and virtually ensures that designers and engineers are working on conflicting generations of the piping layout. In this session, the speaker will provide an overview of CAESAR II as well as preview and discuss the plans and ideas for the “smart” integration of Smart 3D (as SmartPlant 3D and SmartMarine 3D are collectively known) and CAESAR II. You'll see how data can best be exchanged between Smart 3D and CAESAR II today, and will learn what you can eventually expect to see in terms of true integration of the design to engineering process.