

ENC: Recurso COPEL RECURSO - Chamada Pública 002_2021 SCD

De Grecci Junior, Vanderlei <vgrecci@minsait.com>

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Para: Compras Servicos DIS <compras.dis.servicos@copel.com>

 3 anexos (4 MB)

COPEL RECURSO - Chamada Pública 002_2021 v.Final.pdf; Summary.pdf; Anexo I.PDF;

Prezados,

Como não recebemos qualquer confirmação automática de entrega do e-mail enviado ontem e, desconfiando haver ocorrido algum problema técnico, encaminho novamente recurso interposto pela MINSAIT BRASIL LTDA.

Cordialmente,



Vanderlei de Grecci

Account Executive – Utilities

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De: De Grecci Junior, Vanderlei**Enviada em:** sexta-feira, 3 de dezembro de 2021 18:17**Para:** compras.dis.servicos@copel.com**Cc:** Cardoso Del Monte, Rubens <rmonte@minsait.com>; Bueno De Paiva Sousa, Fernanda <fbuenop@indracompany.com>**Assunto:** Recurso COPEL RECURSO - Chamada Pública 002_2021 SCD

Prezados colegas da Copel,

Encaminho recurso em face da decisão de pré-qualificação das empresas Accenture do Brasil Ltda. e Atos Brasil Ltda., e consequente inclusão das mesmas na relação preliminar de empresas pré-qualificadas para a presente Chamada Pública, pelos motivos de fato e de direito expostos no anexo.

Por gentileza confirmar o recebimento.

Cordialmente,

Vanderlei de Grecci
Executivo de Conta

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À COMPANHIA PARANAENSE DE ENERGIA – COPEL DISTRIBUIÇÃO S.A. (“COPEL”)

Ilustríssimos Senhores Maximiliano Andres Orfali, Adriano Rudek de Moura, Denise Scoparo Penitente, Lucimar Pereira Arce, Breno Cesar Souza Castro, Hemerson Luiz Barbosa Pedroso, Eduardo Martins Paulico, Edson Tetsuya Shimura, Elon Carlo Valerio, Volnei Dalla Valle - Autoridades signatárias.

Referência: Chamada Pública COPEL DIS nº SGD 002/2021 (“Chamada Pública”)

MINSAIT BRASIL LTDA., inscrita no CNPJ sob o nº 05.276.991/0001-53, com sede na Avenida Guido Caloi, nº 1002, Torre III, Panamérica Green Park, na cidade de São Paulo, Estado de São Paulo (“MINSAIT”), vem respeitosamente à presença de Vossas Senhorias, por seus representantes legais infra-assinados, com fulcro no item 7.2.1 do Edital da Chamada Pública em referência e item 7.2.4 do Regulamento Interno de Licitações e Contratos da COPEL, apresentar

RECURSO ADMINISTRATIVO

em face da decisão de pré-qualificação das empresas Accenture do Brasil Ltda. e Atos Brasil Ltda., e consequente inclusão das mesmas na relação preliminar de empresas pré-qualificadas para a presente Chamada Pública, pelos motivos de fato e de direito que passa a expor:

1. DA TEMPESTIVIDADE

Nos termos do item 7.2.1 do Edital da Chamada Pública, cabe destacar a tempestividade do presente Recurso, conforme publicação da relação preliminar de empresas pré-qualificadas no sítio eletrônico da COPEL em 26/11/2021, quando foi iniciado o prazo de 5 (cinco) dias úteis, o qual tem seu termo final em 03/12/2021.

2. BREVE RESUMO FÁTICO

Trata-se de Chamada Pública que tem por objeto prospectar e pré-qualificar empresas para fornecimento de solução comercial para a COPEL – SCD, contendo os seguintes macros módulos: Billing; CRM (Customer Resource Manager); Agência Virtual; LIS (Leitura e Impressão Simultânea); e Analytics. A solução comercial deverá contemplar, ainda: (i) Licenciamento de direito de uso para toda a Solução Comercial da Distribuição; (ii) Serviço de implantação da Solução Comercial da Distribuição; (iii) Serviço de Suporte e Manutenção na Solução Comercial da Distribuição; (iv) Treinamento na Solução Comercial da Distribuição; e (v) Serviço de parametrização, customização e realização das integrações, conforme especificação técnica constante no Anexo I - Especificação Técnica.

Finalizadas as Etapas I e II da Chamada Pública, a COPEL divulgou por meio de seu sítio na internet a relação preliminar das empresas pré-qualificadas, dentre elas a Accenture do Brasil Ltda. (“Accenture”) e Atos Brasil Ltda. (“Atos”), no entanto, referidas empresas não cumprem integralmente o Edital da Chamada Pública, não se sustentando a decisão preliminar de pré-qualificação, já que afronta preceitos legais dos quais a COPEL tem o dever de observar.

3. RAZÕES RECURSAIS

A Chamada Pública em referência exigiu os seguintes documento de qualificação técnica:

3.2.3. Documentos de qualificação técnica:

3.2.3.1. *Atestado de capacidade técnica que comprove que a solução opere (esteja implantada e ativa) de maneira satisfatória com:*

i) módulo Billing da solução SCD em uma empresa distribuidora de energia elétrica nacional

ou internacional que tenha, pelo menos, 2.400.000 consumidores sendo gerenciados através da solução;

ii) módulo CRM da solução SCD em uma empresa nacional ou internacional que tenha, pelo menos, 2.400.000 consumidores sendo gerenciados através da solução;
e

iii) módulos Agência Virtual, LIS e Analytics da solução SCD em empresa nacional ou internacional de qualquer porte.

3.2.3.2. *Atestado de capacidade técnica que comprove que o proponente tenha implantado de maneira satisfatória:*

i) módulo Billing da solução SCD em uma empresa distribuidora de energia elétrica nacional ou internacional que tenha, pelo menos, 2.400.000 consumidores sendo gerenciados através da solução;

ii) módulo CRM da solução SCD em uma empresa nacional ou internacional que tenha, pelo menos, 2.400.000 consumidores sendo gerenciados através da solução;
e

iii) módulos Agência Virtual, LIS e Analytics da solução SCD em empresa nacional ou internacional de qualquer porte.

Adicionalmente, através de resposta à questionamento apresentado, a COPEL confirmou a necessidade de apresentar atestados de capacidade técnica da **SOLUÇÃO OFERTADA** que fossem de **uma mesma solução**, vejamos:

Pergunta 01

Pedimos confirmar o entendimento do item 3.2.3.1.2. Entendemos que é possível apresentar diferentes atestados/implantações da solução oferta, mas que ao solicitar demonstrar a capacidade técnica da solução ofertada, os atestados apresentados deverão fazer referência à módulos de uma única solução/vendor único e não é possível ofertar diferentes soluções para composição (por exemplo SCD de empresa A e CRM/LIS de empresa B). Está correto nosso entendimento?

Resposta 01

Sim, o entendimento está correto. Embora possam ser apresentados atestados de empresas diferentes, todos os atestados deverão fazer referência à mesma solução, que é a solução que deverá ser ofertada para a COPEL.

Referidas exigências não foram integralmente atendidas pela Accenture e pela Atos, como passa a ser demonstrado.

3.1. DO NÃO ATENDIMENTO DO EDITAL DA CHAMADA PÚBLICA PELA ACCENTURE DO BRASIL LTDA.

3.1.1. Do Atestado emitido pela CPFL Energia Ltda.

Analisando a documentação apresentada, é possível identificar que a Accenture tenta demonstrar o cumprimento dos itens 3.2.3.1 (iii) e 3.2.3.2 (iii) através do atestado emitido pela CPFL Energia Ltda. (“CPFL”), contudo, por conhecer o ambiente da CPFL, em razão da execução de projetos na Agência Virtual, a MINSAIT afirma e passa a comprovar que referido atestado não atende as exigências de qualificação técnica constantes do Edital da Chamada Pública.

Isto porque, o Edital solicita a apresentação de “*atestado de capacidade técnica que comprove que a solução opere (esteja implantada e ativa) de maneira satisfatória com (..) módulos Agência Virtual, LIS e Analytics da solução SCD em empresa nacional ou internacional de qualquer porte*”, no entanto, o atestado emitido pela CPFL faz referência ao desenvolvimento, sob medida, de um portal web integrado ao SAP CCS (sistema comercial da SAP), através do bus de integração SAP PO, **não sendo parte do SAP CCS, mas sim integrado ao mesmo**, diferindo do exigido pela COPEL no Edital da Chamada Pública.

A comprovação de que o portal se trata de uma solução a parte e não de um módulo do SAP CCS é que o mesmo é desenvolvido utilizando linguagem .NET, Angular e Sharepoint, tecnologias totalmente divergentes à arquitetura e padrão do SAP CCS. Além de não ser uma solução “SAP”, sendo um desenvolvimento próprio de outra empresa, não poderia ser ofertado à COPEL.

3.1.2. Do Atestado emitido pela Enel Distribuição SP.

Em mais uma tentativa de ludibriar a COPEL, a Accenture tenta se valer de atestado que não cumpre as exigências do Edital da Chamada Pública, uma vez que apresentou atestado de capacidade técnica emitido pela Enel Distribuição SP (“Enel”) como suposta comprovação dos itens 3.2.3.1 (iii) e 3.2.3.2 (iii) do Edital. Todavia, **o sistema referenciado neste**

referido atestado se trata de sistema desenvolvido sob medida integrado ao SAP CCS, mas não um módulo do SAP CCS:

4) Denominação, Descrição e Finalidade dos Serviços

Durante o projeto foram realizadas as seguintes atividades:

- Resenho da experiência e mapeamento da jornada do cliente;
- Desenvolvimento da nova "Agência Virtual" responsiva, utilizando baseada em tecnologias/Frameworks como AngularJS e provendo aos clientes aproximadamente 30 diferentes serviços para autoatendimento (B2C);
- Desenvolvimento do Portal do Atendente (interface Web utilizada pelos times de Backoffice, Ouvidoria, CRC e Lojas), integrando a solução de Call Center com os sistemas de CRM/CSS da Enel;

Módulo / Sistema	Linguagem de Desenvolvimento	Banco de Dados	Plataforma Tecnológica	Responsável pelo Suporte
Agência Virtual / Portais	AngularJS / HTML / CSS / Javascript	N/A	Web	Accenture
Camada de Integração	NodeJS	SAP CCS / CRM??	Web	Accenture

Novamente, é um desenvolvimento ad-hoc e não uma solução SAP, não se cumprindo a necessidade de apresentar atestados em referência à mesma solução que será ofertada nesta Chamada Pública à COPEL e, mais uma vez, a Accenture não cumpre referida exigência.

3.1.2. Do Atestado emitido pela Equatorial Energia S.A.

Em mais uma tentativa frustrada de comprovar sua qualificação técnica, a Accenture apresenta atestado emitido pela Equatorial Energia S.A. ("Equatorial") para suposto atendimento aos itens 3.2.3.1 e 3.2.3.2, entretanto, a solução apresentada para o módulo LIS (Leitura e Impressão Simultânea), denominada no atestado como MOM, é na verdade **pertencente à Prologa, uma empresa independente e não pertencente ao grupo econômico da SAP**, conforme se comprova no Manual do Usuário que segue como Anexo I do presente Recurso.

Ou seja, considerando a necessidade de que a solução referenciada nos atestados seja a mesma solução a ser ofertada à COPEL nesta Chamada Pública, tem-se que a Accenture também não consegue comprovar as exigências do Edital com o atestado emitido pela Equatorial.

Desta forma, é inquestionável que os atestados emitidos pela CPFL, Enel e Equatorial não atendem às exigências desta Chamada Pública, de forma que a Accenture, por não conseguir comprovar o integral cumprimento aos itens 3.2.3.1 e 3.2.3.2 do Edital deve ser considerada desclassificada.

3.2. DO NÃO ATENDIMENTO DO EDITAL DA CHAMADA PÚBLICA PELA ATOS BRASIL LTDA.

3.2.1. Do Atestado emitido pela Claro S/A.

Em análise da documentação apresentada pela Atos, especificamente o atestado emitido pela Claro S/A ("Claro"), é possível identificar que com referido atestado a Atos

não atende a nenhuma das exigências de qualificação técnica constante do item 3.2.3 do Edital da Chamada Pública, ao passo que **a Claro não é empresa distribuidora de energia elétrica nacional ou estrangeira como expressamente exige os itens 3.2.3.1 (i) e 3.2.3.2 (i) do Edital.**

Além disso, a Atos não comprova sua experiência anterior e capacidade em implantar a solução ofertada SAP CCS e seus módulos Billing, CRM, LIS, Agencia Virtual e Analytics, uma vez que **o atestado apresentado descreve apenas execução de serviços de desenvolvimento e configuração sob medida e não a execução do projeto de implantação da solução proposta, como é o exigido.** Sequer é citado o termo “SAP” ou tecnologias pertinentes à mesma no atestado:

Claro-

Atestado de Capacidade Técnica

Atestamos que a empresa **ATOS BRASIL LTDA.**, inscrita no CNPJ: 64.943.665/0001-11, com sede na rua Werner von Siemens, N.º: 111, Lapa, São Paulo – SP, exerce um contrato de Sustentação SAP com a **Claro S/A**, inscrita no CNPJ: 40.432.544/0001-47, com sede na Rua Henri Dunant, nº 780, Torres A e B, Bairro Santo Amaro, São Paulo – SP.

Escopo de Serviços:
Serviços de Desenvolvimento de Apoio:

- A Atos realiza **serviços de desenvolvimento e configuração de Sistemas de Apoio, desde 2007, com volume equivalente a mais de 100.000 horas nos últimos 2 anos.**

Nome do Sistema	Descrição
PIB	Sistema de Numeração
Faturamento	Sistema de extração de dados de faturamento
SRV	Sistema de Repasse de VAS
SOA	Fachada de Serviços SOA
BOW	Sistema de Gestão Conta Online
SCC	Sistema de Cobilling
SPN	Sistemas de Portabilidade
AR	Sistemas de Arrecadação e Cobrança

Escopo de Tecnologias:

- Java (SOA, Rest API, EJB, JMS, Servlet), Frameworks Java (Spring, JSF, Hibernate, XDoclets), Javascript (Node WebKit, jQuery), Oracle PL/SQL, C++, Pro C, Shell Script, PHP (Kohana, WebServices, Rest API, MVC), MySQL.

Os serviços estão sendo realizados dentro dos níveis e padrões técnicos contratados, sendo executados de forma plenamente satisfatória.

São Paulo, 25/10/2019

Evidente, portanto, que este atestado não comprova a qualificação técnica exigida no item 3.2.3 e subitens do Edital da Chamada Pública, como tenta demonstrar, sem sucesso, a Atos.

3.2.2. Do Atestado emitido pelo Clube de Regatas do Flamengo.

Passando agora à análise do atestado emitido pelo Clube de Regatas do Flamengo (“Flamengo”), é possível identificar que a Atos não consegue demonstrar o cumprimento dos itens 3.2.3.1 (i) e (ii) e 3.2.3.2 (i) e (ii).

Isso porque, o referido atestado, da mesma forma, **não é emitido por empresa distribuidora de energia elétrica nacional ou estrangeira como expressamente exige os itens 3.2.3.1 (i) e 3.2.3.2 (i) do Edital.** Ademais, **não comprova a implantação e utilização da solução ofertada nesta Chamada Pública (SAP CCS) com seus módulos Billing e CRM:**

Escopo de Tecnologias:

- SAP ERP, com os seguintes módulos: FI, CO, MM, HCM, PY, Workflow e Hana (Embedded Analytics).

Além disso, **no referido atestado não há qualquer comprovação da implantação e utilização dos módulos Agência Virtual e LIS, como se exige em Edital**, em evidente descumprimento das exigências de qualificação técnica.

3.2.3. Dos Atestados emitidos pela TIM S/A

Em mais uma tentativa frustrada de demonstrar sua suposta qualificação técnica, a empresa Atos apresenta dois atestados emitidos pela TIM S/A ("TIM"), no entanto, não consegue comprovar o atendimento aos itens 3.2.3.1 (i), (ii), (iii) e 3.2.3.2 (i), (ii), (iii) do Edital da Chamada Pública.

Primeiramente, é evidente que estes são mais atestados apresentados em total desacordo com os itens 3.2.3.1 (i) e 3.2.3.2 (i), já que **emitidos por empresa que não é distribuidora de energia elétrica nacional ou estrangeira**.

No mais, um dos atestados menciona a implantação da solução CRM da Microsoft, enquanto outro menciona apenas um desenvolvimento, sob medida, de portal de pré-vendas e vendas, **não mencionando em nenhum momento a solução ofertada pela Atos ou seus módulos (SAP CCS: Billing, CRM, LIS, Agência Virtual, Analytics)**. Ademais, com relação à resposta da Atos ao diligenciamento realizado pela Copel, tampouco deveria ser suficiente, uma vez que **não relaciona a experiência da Atos à solução ofertada, como se é exigido em Edital**:

- **Atendimento ao módulo de Agência Virtual:** Para atendimento a este requisito, estamos apresentando os atestados da Claro (Atos – ACT – Claro.pdf), que cita experiência no desenvolvimento e configuração para Sistemas de Numeração, extração de dados e faturamento, Gestão de Conta Online, Co-Billing, Portabilidade, Arrecadação e Cobrança entre outros.
 - Adicionalmente, estamos apresentando também atestados de capacidade técnica da Empresa TIM (Atos – ACT – TIM1.pdf e Atos – ACT – TIM2.pdf), que ratificam nossa experiência no desenvolvimento de sistemas de Vendas, Pré-Vendas, e Atendimento à Clientes.

Como se não bastasse, **referidos atestados também não comprovam a capacidade da Atos em implantar a solução ofertada SAP CCS e seus módulos Billing, CRM, LIS, Agência Virtual e Analytics**, já que os atestados não trazem estas referências, se limitando a atestar:

Escopo de Serviços:

- Serviços de desenvolvimento e manutenção corretiva;
- Fornecimento e suporte aos softwares que integram a solução Portal de Serviços: ZK, Fusion Charts, Pentaho e Orion.
- Desenvolvimento Agile;
- Serviços de configuração, adaptação, desenvolvimento, integração aos sistemas corporativos, integração aos sistemas de Call Center, serviços de testes, serviços de suporte e manutenção evolutiva;
- Mais de 10.000 horas de desenvolvimento;
- Implementação do **MS CRM Dynamics** com as funções de Vendas, Pré-Vendas, Gestão de Vendas e Atendimento ao Cliente, para suporte a unidade TIM soluções corporativas.

Escopo de Tecnologias:

- **Microsoft Dynamics CRM;**
- Java, C#, .NET, Oracle Database.

Desta forma, inquestionável que a Atos não comprova com os atestados emitidos pela TIM o atendimento aos itens 3.2.3.1 (i), (ii), (iii) e 3.2.3.2 (i), (ii), (iii) do Edital da Chamada Pública, como tenta demonstrar.

3.2.4. Do Atestado emitido pela A2A S.p.A.

No intuito de comprovar capacidade técnica que aparentemente não detém, a Atos também apresenta atestado emitido pela A2A S.p.A (“A2A”), contudo, referido atestado não comprova o cumprimento da Atos às exigências constantes dos itens 3.2.3.1 (i) e 3.2.3.2 (i) do Edital da Chamada Pública, ao passo que **a A2A não possui, ao menos, 2.400.000 de consumidores em energia elétrica sendo gerenciados através da solução, conforme é exigido em Edital e reafirmado pela COPEL em resposta à questionamento recebido:**

- servizi di implementazione ed integrazione di un sistema di fatturazione per utilities, su modulo SAP ISU. Atos ha partecipato sia alle fasi di analisi requisiti che di disegno tecnico e realizzazione delle soluzioni, inclusa la progettazione del Modello Dati.
Per il suindicato servizio Atos Italia S.p.A. ha fatturato ad A2A, nel periodo 2012-2017 più di € 8.000.000,00 (IVA esclusa) per il **settore elettrico**.
Nello specifico Atos Italia ha gestito un nr. di punti di fornitura superiore a **1.200.000** unità;

Pergunta 01

Sobre a resposta 19 do esclarecimento nº 02, solicitamos confirmar que para o item 3.2.3.1 as soluções devem atender a 2,4mi clientes de energia elétrica, correto? Ou seja, em se tratando de uma empresa multi-utility, deverá ser comprovado que o módulo atende ao quantitativo solicitado para energia elétrica.

Resposta 01

Sim, o entendimento está correto.

Além disso, referido atestado também não cumpre as exigências dos itens 3.2.3.1 (ii) e 3.2.3.2 (ii) do Edital, já que da mesma forma, **também não cumpre com o quantitativo exigido em relação ao “módulo CRM da solução SCD em uma empresa nacional ou internacional que tenha, pelo menos, 2.400.000 consumidores sendo gerenciados através da solução”:**

- servizi di implementazione ed integrazione di un sistema di CRM per utilities, su modulo **SAP CRM**. Atos ha partecipato sia alle fasi di analisi requisiti che di disegno tecnico e realizzazione delle soluzioni, inclusa la progettazione del Modello Dati.
Per il suindicato servizio Atos Italia S.p.A. ha fatturato ad A2A, nel periodo 2012-2017 più di € 6.500.000,00 (IVA esclusa) **per il settore elettrico e gas**.
Nello specifico Atos Italia ha gestito un nr. di punti di fornitura superiore a **2.000.000** unità;
- servizi di manutenzione applicativa, sulle seguenti applicazioni:
 - SAP ISU
 - SAP CRM

Cabe ressaltar ainda que em fase de diligenciamento, a Atos chega a demonstrar que questionou a A2A sobre o fato da solução gerenciar mais de 2.400.000 de consumidores, contudo, **realiza o questionamento sem especificar que esta quantidade deveria se referir à**

consumidores de energia elétrica, em uma tentativa de ludibriar e induzir a erro à COPEL, em frente ao atestado anteriormente apresentado que comprovadamente atesta quantidade significativamente inferior:

De: Risi Emiliano <emiliano.risi@a2a.eu>
Enviado: segunda-feira, 25 de outubro de 2021 10:12
Para: PARRAVICINI, SIMONE <simone.parravicini@atos.net>
Assunto: RE: Referência a2a
Oi, Simone!
Confirmo ambos os pontos.
Obrigado!
Atenciosamente,
ER.
Emiliano Risi
Group ICT | IT Mercato & Commerciale
celular (+39) 342.1929209 | tel (+39) 02.7720.4169
e-mail: emiliano.risi@a2a.eu
[Consta logotipo de a2a]
Bom dia, Emiliano.
Por favor, precisamos de uma confirmação de vocês a respeito de:
- o sistema SAP IS-U administra mais de 2,4 milhões de pontos de fornecimento
- a fatura feita por SAP IS-U baseia-se no consumo real de energia elétrica ou gás do cliente final, se disponível
Muito obrigado.
Atos Italia Spa - Via Caldera, 21 - Pal. C1 - 20153 Milão
Itália
atos.net

Buongiorno Emiliano, avremmo cortesemente bisogno di una conferma da parte vostra che:

- il sistema SAP IS-U gestisce più di 2,4 milioni di punti di fornitura
- la bolletta prodotta da SAP IS-U si basa sul consumo reale di energia elettrica o gas del cliente finale, se disponibile

Grazie il <mailto:emiliano.risi@a2a.eu>

Atos

Simone Parravicini

Client Partner – Resources & Services Italy

M: +39 3358470842

Atos Italia Spa - Via Caldera, 21 - Pal. C1 - 20153 Milano Italy

Ciao Simone, confermo ambo i punti

Grazie
Un saluto
ER

Emiliano Risi
Group ICT | IT Mercato & Commerciale
mob. (+39) 342.1929209 | tel. (+39) 02.7720.4169
mail: emiliano.risi@a2a.eu



Como se não fosse o suficiente, é ainda possível identificar que com o atestado emitido pela A2A, a Atos também não comprova o atendimento aos itens 3.2.3.1 (iii) e 3.2.3.2 (iii) do edital da Chamada Pública, **por não comprovar a implantação dos módulos de Agência Virtual, LIS e Analytics.**

Especificamente em relação ao LIS, **a Atos afirma que tal solução faz parte do projeto executado, entretanto, não existe nenhuma declaração oficial por parte da A2A neste sentido**, não tendo, portanto, a Atos comprovado o cumprimento destas exigências.

É importante destacar que o módulo para faturamento e impressão simultânea em campo não é apenas uma funcionalidade do sistema de Billing para faturamento com base nas informações reais, mas sim um aplicativo mobile que permita às equipes de campo registrar a leitura dos medidores, emitir a fatura referente a estes valores e imprimir para entregar ao cliente em campo:

De: Risi Emiliano <emiliano.risi@a2a.eu>
Enviado: segunda-feira, 25 de outubro de 2021 10:12
Para: PARRAVICINI, SIMONE <simone.parravicini@atos.net>
Assunto: RE: Referência a2a
Oi, Simone!
Confirmo ambos os pontos.
Obrigado!
Atenciosamente,
ER.
Emiliano Risi
Group ICT | IT Mercato & Commerciale
celular (+39) 342.1929209 | tel (+39) 02.7720.4169
e-mail: emiliano.risi@a2a.eu
[Consta logotipo de a2a]
Bom dia, Emiliano.
Por favor, precisamos de uma confirmação de vocês a respeito de:
- o sistema SAP IS-U administra mais de 2,4 milhões de pontos de fornecimento
- a fatura feita por SAP IS-U baseia-se no consumo real de energia elétrica ou gás do cliente final, se disponível
Muito obrigado.
Atos Italia Spa - Via Caldera, 21 - Pal. C1 - 20153 Milão
Itália
atos.net

Desta forma, não pairam dúvidas de que a Atos não comprova as exigências constantes do Edital da Chamada Pública com a apresentação deste atestado emitido pela A2A.

3.2.5. Do Atestado emitido pela Enel Itália.

O atestado emitido pela Enel Itália (“Enel”), pode até comprovar o atendimento às exigências constantes dos itens 3.2.3.1 (i) e 3.2.3.2 (i) do Edital da Chamada Pública, entretanto, maliciosamente tenta a Atos embair a Copel ao afirmar que a solução para leitura e faturamento em campo é parte do projeto executado, quando não consta nenhuma declaração oficial por parte da Enel a não ser uma frase dizendo que a solução ISU realiza o faturamento com base no consumo real do cliente, funcionalidade básica de qualquer Billing de mercado:

- **Em atendimento ao Item:** 3.2.3.2 iii) módulos Agência Virtual, LIS e Analytics da solução SCD em empresa nacional ou internacional de qualquer porte.;
- **Atendimento ao módulo de LIS:** Compartilhamos em anexo, email da empresa A2A e também carta emitida pela empresa ENEL que confirmam que o faturamento (billing) dessas empresas é feita pelo consumo real dos clientes, garantindo assim o atendimento ao item de LIS - Leitura e Impressão Simultânea.
- Estamos também aguardando a confirmação da empresa ACEA, ratificando que possui essa funcionalidade em uso da leitura / faturamento baseada no consumo real.
- Como indicado acima, já solicitamos a tradução juramentada desta documentação e compartilharemos com a COPEL assim que disponível.

No mais, como escrito acima, solicitamos a extensão de até dois dias úteis de prazo, para o recebimento do último documento que fecha nossa habilitação técnica para esse certame.

Por fim, voltamos a agradecer a oportunidade e seguimos a disposição para maiores esclarecimentos adicionais.

Solicitamos a confirmação do recebimento desta mensagem.

Obrigado!

João Alberto Canejo

Certificado de execução

ATOS

Número de Identificação: 00795910157.

Nome e Endereço do Licitante:

Nome de Referência/Projeto: Migração para SAP S/4 HANA.

Cliente: Enel Energia.

Pessoa de Contato do Cliente, disponível para dúvidas sobre o contrato (incluindo endereço, número de telefone e e-mail): Rosario Piscopo.

Via Galileo Ferraris, 59 – 80142 Napoli – Itália.

rosario.piscopo@enel.it.

+39 3283105474.

Informação (fornecida pelo fornecedor).

Descrição: O número de clientes gerenciado no sistema S/4 HANA é superior a 8 milhões.

As faturas são baseadas nos consumos reais dos clientes.

Confirmação da referência pelo Cliente:

O Cliente confirma que o Projeto/serviço foi totalmente executado ou está sendo executado pelo licitante acima descrito, mediante os termos e condições estabelecidos no Contrato relevante em conformidade com as exigências, e com profissionalismo.

Data: 21 de outubro de 2021.

Nome: Rosario Piscopo.

Enel Global Digital Solution.

Chefe de Plataformas de Medição, Faturamento e Crédito.

Assinado: [Rosario Piscopo].

Ou seja, entre a documentação apresentada pela Atos **não há qualquer comprovação do cumprimento da exigência de implantação de módulo para o registro das leituras em campo e a posterior emissão e impressão da fatura ainda em campo.**

Resta, por tanto, claramente demonstrado que a Atos não demonstrou sua qualificação técnica, ao passo que não conseguiu comprovar o atendimento integral às exigências constantes do Edital da Chamada Pública com a apresentação dos atestados emitidos pela Claro, Flamengo, TIM, A2A e Enel.

4. DO DIREITO

4.1. DA NÃO OBSERVÂNCIA AO PRINCÍPIO DA VINCULAÇÃO AO INSTRUMENTO CONVOCATÓRIO

O procedimento de Chamada Pública para pré-qualificação precisa seguir os princípios gerais aplicáveis à Administração Pública, e conforme disposto no próprio Edital em referência, deve observar os preceitos e normas contidas na Lei 13.303/16, no Regulamento Interno de Licitações e Contratos da COPEL e se pautar pelas condições específicas constantes do Edital e dos demais documentos que o integram.

Sendo assim, a atuação da COPEL nesta Chamada Pública é vinculada e limitada, o que significa dizer que só pode atuar nos termos da lei, pois as regras do Edital, seus adendos e anexos devem ser aplicadas de modo estrito e fiel, sem inovações ou alterações, vez que devem ser interpretadas estritamente.

Dispõe o artigo 31 da Lei 13.30/16 que o procedimento licitatório, inclusive o procedimento prévio de Chamada Pública para pré-qualificação, deve observar, dentre outras, a seguinte regra:

“Art. 31. As licitações realizadas e os contratos celebrados por empresas públicas e sociedades de economia mista destinam-se a

assegurar a seleção da proposta mais vantajosa, inclusive no que se refere ao ciclo de vida do objeto, e a evitar operações em que se caracterize sobrepreço ou superfaturamento, devendo observar os princípios da impessoalidade, da moralidade, da igualdade, da publicidade, da eficiência, da proibidade administrativa, da economicidade, do desenvolvimento nacional sustentável, da vinculação ao instrumento convocatório, da obtenção de competitividade e do julgamento objetivo.”

Essa regra decorre diretamente do princípio constitucional da legalidade, previsto no artigo 37 da Constituição Federal, de forma que é patente que tanto as empresas participantes do certame estão vinculadas à plena observância do Edital, como, neste caso, a própria COPEL está vinculada a exigir das empresas participantes o integral atendimento do instrumento convocatório, nos termos do artigo supracitado.

Como bem destacou Marçal Justen Filho (*Comentários à Legislação do Pregão Comum e Eletrônico*. 6ª ed. rev. e atual, 2013):

“Não se pode admitir que a Administração veicule ato convocatório estabelecendo limites, exigências, condições de participação e de elaboração de propostas e, depois, simplesmente ignore a sua própria conduta anterior. Sequer se pode invocar, pura e simplesmente o princípio da ampliação da competição para justificar a inobservância do conteúdo do Edital. Quanto a isso, deve-se ter em vista o universo de competidores foi delimitado pelas regras do ato convocatório. Aqueles que não preenchem as exigências deixaram de participar do certame. Seria a suprema injustiça que o sujeito ousado, que ignorou as regras do Edital e se aventurou a participar do certame sem preencher os requisitos para tanto, fosse premiado com a vitória. Então, todos os empresários sérios e honestos, que se abstiveram de competir por respeitarem as condições do certame, teriam sido lesados e ludibriados.”

Portanto, sendo mantida a decisão que declarou a Accenture e a Atos como pré-qualificadas para esta Chamada Pública, haveria clara infração das regras estabelecidas no Edital, hipótese que deflagraria **manifesta nulidade da decisão**.

Corroborando o entendimento exposto, pertinente a lição deixada por Hely Lopes Meirelles (*Direito Administrativo Brasileiro*. 42ª ed., 2015):

“Vinculação ao Edital: a vinculação ao Edital é princípio básico de toda licitação. Nem se compreenderia que a Administração fixasse no Edital a forma e o modo de participação dos licitantes e no decorrer do procedimento ou na realização do julgamento se afastasse do estabelecido, ou admitisse documentação e propostas em desacordo com o solicitado. O Edital é a lei interna

da licitação, e, como tal, vincula aos seus termos tanto os licitantes como a Administração que o expediu”.

Se a decisão ora recorrida não considerar as razões trazidas neste Recurso, estaria por violar os princípios da legalidade, da eficiência, do julgamento objetivo e da própria vinculação ao Edital, dentre tantos outros.

Se esses princípios vigem com rigor para as empresas interessadas e participantes da Chamada Pública, com mais razão se mostra impositivo para a COPEL que foi a responsável pelo estabelecimento dos critérios e requisitos do Edital e, portanto, a eles está compulsoriamente vinculada.

No mesmo sentido, a jurisprudência consolidada do Tribunal de Contas da União, apontando violação aos princípios da legalidade, julgamento objetivo e da vinculação ao instrumento convocatório diante da aceitação de documentação comprobatória de capacitação técnica em desacordo com os termos do Edital:

“INSERE-SE NA ESFERA DE DISCRICIONARIEDADE DA ADMINISTRAÇÃO A ELEIÇÃO DAS EXIGÊNCIAS EDITALÍCIAS CONSIDERADAS NECESSÁRIAS E ADEQUADAS EM RELAÇÃO AO OBJETO LICITADO, COM A DEVIDA FUNDAMENTAÇÃO TÉCNICA. ENTRETANTO, EM RESPEITO AO PRINCÍPIO DA VINCULAÇÃO AO INSTRUMENTO CONVOCATÓRIO, É INADMISSÍVEL QUE A ADMINISTRAÇÃO DEIXE DE APLICAR EXIGÊNCIAS PREVISTAS NO PRÓPRIO EDITAL QUE TENHA FORMULADO.”

TCU, Acórdão 2730/2015, Plenário, Rel. Bruno Dantas.

“A ADJUDICAÇÃO E A HOMOLOGAÇÃO DO OBJETO DO CERTAME À EMPRESA DECLARADA VENCEDORA COM BASE EM CRITÉRIO DE CLASSIFICAÇÃO DESCONFORME COM OS REQUISITOS DO EDITAL E DO TERMO DE REFERÊNCIA, INTRODUZIDO EM SISTEMA OFICIAL (COMPRASNET) SEM A REPUBLICAÇÃO DO INSTRUMENTO CONVOCATÓRIO, AFRONTA OS PRINCÍPIOS DA LEGALIDADE, DA VINCULAÇÃO AO INSTRUMENTO CONVOCATÓRIO E DO JULGAMENTO OBJETIVO.”

TCU, Acórdão 1681/2013, Plenário, Rel. Benjamin Zymler

“A BUSCA PELA AMPLIAÇÃO DO NÚMERO DE EMPRESAS AUTORIZADAS A PRESTAR O SERVIÇO LICITADO NÃO PODE JUSTIFICAR O DESCUMPRIMENTO DAS NORMAS REGULAMENTARES E EDITALÍCIAS, EM FACE DO PRINCÍPIO CONSTITUCIONAL DA LEGALIDADE E DOS PRINCÍPIOS NORTEADORES DAS LICITAÇÕES, NOTADAMENTE O DA VINCULAÇÃO AO INSTRUMENTO CONVOCATÓRIO.”

TCU, Acórdão 1389/2005, Plenário, Rel. Ubiratan Aguiar

Resta claro, portanto, que como os atestados apresentados pela Accenture e pela Atos não comprovam integralmente o cumprimento de todas as exigências constantes no item

“3.2.3 – Documentos de qualificação técnica” do Edital, a declaração de pré-qualificação destas empresas pela COPEL, caracteriza violação direta ao princípio da vinculação ao instrumento convocatório e outros princípios dos quais a COPEL tem o dever de observar.

Posto isso, com base no princípio da autotutela, uma vez constatado equívoco em qualquer ato ou decisão, principalmente quando se refere à análise de aderência ao escopo dos documentos apresentados conforme exigido no Edital, a reforma das decisões praticadas pela COPEL se mostra imprescindível, a qual deve sempre revisar os próprios atos quando constatada eventual ilegalidade.

Nesse sentido é pacífica a jurisprudência do Supremo Tribunal Federal ao tratar especificamente da inabilitação em certames licitatórios:

“...Com efeito, não há dúvidas de que a autoridade competente, ao constatar a irregularidade da certidão negativa de débitos fiscais estadual tem o dever de anular a decisão de habilitação da empresa licitante, sobretudo porque o documento foi exigido de todos os licitantes, em igualdade de condições, nos termos do item 4.2 do Edital de Concorrência 131/2001-SSR/MC.”

STF, Recurso Ordinário em MS nº 32.055, Segunda Turma, Relator: Min. Gilmar Mendes, Publicação: 06.08.2019

Desta forma, o reconhecimento de que a Accenture e a Atos não comprovaram o cumprimento das exigências do Edital, com a conseqüente reforma da decisão ora recorrida para declarar a desclassificação destas empresas diante da clara inobservância às exigências de qualificação técnicas é medida que se impõe.

4. CONCLUSÃO

Ante o exposto, requer seja recebido e acolhido o presente Recurso, para que a COPEL promova a desclassificação da Accenture do Brasil Ltda. e da Atos Brasil Ltda., excluindo-as da relação definitiva de empresas pré-qualificadas para o fornecimento de solução comercial para a COPEL – SCD, pelo não cumprimento das exigências de qualificação técnica constantes do Edital da Chamada Pública.

N. Termos,
P. Deferimento.

São Paulo, 03 de dezembro de 2021.

DocuSigned by:
Fernanda Bueno De Padua e Disa Biase Gonçalves
1B8194611676493... 9A1DAF45B22C431...
MINSAIT BRASIL LTDA.

Anexo I

Manual do Usuário que comprova que a solução MOM é pertencente à Prologa

Certificado de Conclusão

Identificação de envelope: 91C186E4E3FF4DCB98E2B3532BC9B2C8
 Assunto: DocuSign: COPEL RECURSO - Chamada Pública 002_2021 v.Final.pdf, Anexo I.pdf
 Centro de custo: 7373|21EP06
 Envelope fonte:
 Documentar páginas: 83
 Certificar páginas: 2
 Assinatura guiada: Ativado
 Selo com Envelopeld (ID do envelope): Ativado
 Fuso horário: (UTC-03:00) Brasília

Status: Concluído

Remetente do envelope:
 Bruna Moreira dos Santos
 Av. Guido Caloi, no 1002
 Condomínio Panamérica Green Park, Torre III, 3o
 Andar
 São Paulo, SP 05802-140
 bmoreira@indracompany.com
 Endereço IP: 200.159.15.228

Rastreamento de registros

Status: Original
 03 de dezembro de 2021 | 17:31

Portador: Bruna Moreira dos Santos
 bmoreira@indracompany.com

Local: DocuSign

Eventos do signatário

Fernanda Bueno De Paiva Sousa
 fbuenop@indracompany.com
 Advogada
 Indra
 Nível de segurança: E-mail, Autenticação da conta
 (Opcional)

Assinatura

DocuSigned by:

 1B8194611676488...

Registro de hora e data

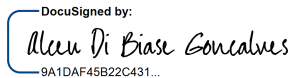
Enviado: 03 de dezembro de 2021 | 17:35
 Visualizado: 03 de dezembro de 2021 | 17:36
 Assinado: 03 de dezembro de 2021 | 17:37

Adoção de assinatura: Estilo pré-selecionado
 Usando endereço IP: 200.159.15.250

Termos de Assinatura e Registro Eletrônico:

Não disponível através da DocuSign

Alceu Di Biase Goncalves
 adib@indracompany.com
 Financeiro
 INDRA BRASIL
 Nível de segurança: E-mail, Autenticação da conta
 (Opcional)

DocuSigned by:

 9A1DAF45B22C431...

Enviado: 03 de dezembro de 2021 | 17:37
 Visualizado: 03 de dezembro de 2021 | 17:38
 Assinado: 03 de dezembro de 2021 | 17:38

Adoção de assinatura: Estilo pré-selecionado
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Eventos do signatário presencial	Assinatura	Registro de hora e data
Eventos de entrega do editor	Status	Registro de hora e data
Evento de entrega do agente	Status	Registro de hora e data
Eventos de entrega intermediários	Status	Registro de hora e data
Eventos de entrega certificados	Status	Registro de hora e data
Eventos de cópia	Status	Registro de hora e data
Eventos com testemunhas	Assinatura	Registro de hora e data
Eventos do tabelião	Assinatura	Registro de hora e data
Eventos de resumo do envelope	Status	Carimbo de data/hora

Eventos de resumo do envelope	Status	Carimbo de data/hora
Envelope enviado	Com hash/criptografado	03 de dezembro de 2021 17:35
Entrega certificada	Segurança verificada	03 de dezembro de 2021 17:38
Assinatura concluída	Segurança verificada	03 de dezembro de 2021 17:38
Concluído	Segurança verificada	03 de dezembro de 2021 17:38

Eventos de pagamento	Status	Carimbo de data/hora
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PROLOGA



**SAP® Mobile Order Management by
PROLOGA**

User Manual

SAP® Certified
Powered by SAP NetWeaver®



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Glossary



Attention



Note

1 Abbreviations

DB	Database
Drag&Drop	In computer graphical user interfaces, drag-and-drop is the action of (or support for the action of) clicking on a virtual object and dragging it to a different location or onto another virtual object. In general, it can be used to invoke many kinds of actions, or create various types of associations between two abstract objects.
GPRS	General Packet Radio Service
HTML	Hypertext Markup Language
ID	Identification
MAC - Address	Media Access Control - Address (Unique identifier of a network adapter within a network)
OBU	On Board Unit
PDA	Personal Digital Assistant
RFC	Remote Function Call
SSL	Secure Socket Layer
UMTS	Universal Mobile Telecommunications System
WLAN	Wireless Local Area Network
XML	Extensible Markup Language

2 Introduction

SAP® Mobile Order Management by PROLOGA enables waste and recycling companies to largely refrain from a paper-based mobile order management and avoid a redundant data acquisition.

The software may be applied whenever companies rely on the coordinated and optimized deployment of their vehicles in order to render services or whenever order relevant performance data have to be captured. One of the advantages of the *SAP® Mobile Order Management by PROLOGA* is a consistent tracking of vehicle usage and mobile resources.

The *SAP® Mobile Order Management by PROLOGA* supports a series of on-board computer units. Installed in your fleet these units form the interface between vehicle/driver and your SAP® backend system.

When deploying the *SAP® Mobile Order Management by PROLOGA* you are enabled to send orders, documents or data to your vehicle fleet and receive status information from your vehicles at all times. Data captured in the vehicles are automatically sent to the SAP® backend system where they may be checked and approved. A subsequent manual data entry is not required.

The *SAP® Mobile Order Management by PROLOGA* provides as well all functionalities required for the administration on the installed OBUs.

When applying the *SAP® Mobile Order Management by PROLOGA* you will reduce your personnel costs otherwise resulting from the order provision, confirmation of performance data or the container tracking. Due to the always current status information you may react more efficiently and faster to changing constraints. Thereby you will not only optimize the deployment of your vehicle fleet but internal processes associated with order processing as well.

2.1 Basic system structure of the SAP® Mobile Order Management by PROLOGA

The *SAP® Mobile Order Management by PROLOGA* does not only maintain your data in the SAP® system, but supports the data flow between the OBUs installed in your vehicles and the backend system whereas the illustrated system structure (see Figure 1) is recommended.

Your vehicle (or rather the OBU installed in your vehicle) regularly connects via GPRS¹, WLAN² or UMTS³ to a Web Service, which is installed on the Web Application Server of the SAP® system. As soon as the systems are connected, the OBU transmits all stored data to the Web Service. In order to guarantee a secure data transmission, the communication is protected via SSL⁴ encryption.

The Web Service forwards data via RFC⁵ to the *SAP® Mobile Order Management by PROLOGA*, where the information is processed. Data are not saved within the Web Service.

As soon as the OBU transmitted the data, the *SAP® Mobile Order Management by PROLOGA*, checks if there are information to be provided in return for the OBU. If this is the case, these data are transmitted to the Web Service which will then forward it to the OBU.

After successful transmission of the data the connection will be closed.

1 GPRS – General Packet Radio Service

2 WLAN – Wireless Local Area Network

3 UMTS – Universal Mobile Telecommunications System

4 SSL – Secure Socket Layer

5 RFC – Remote Function Call

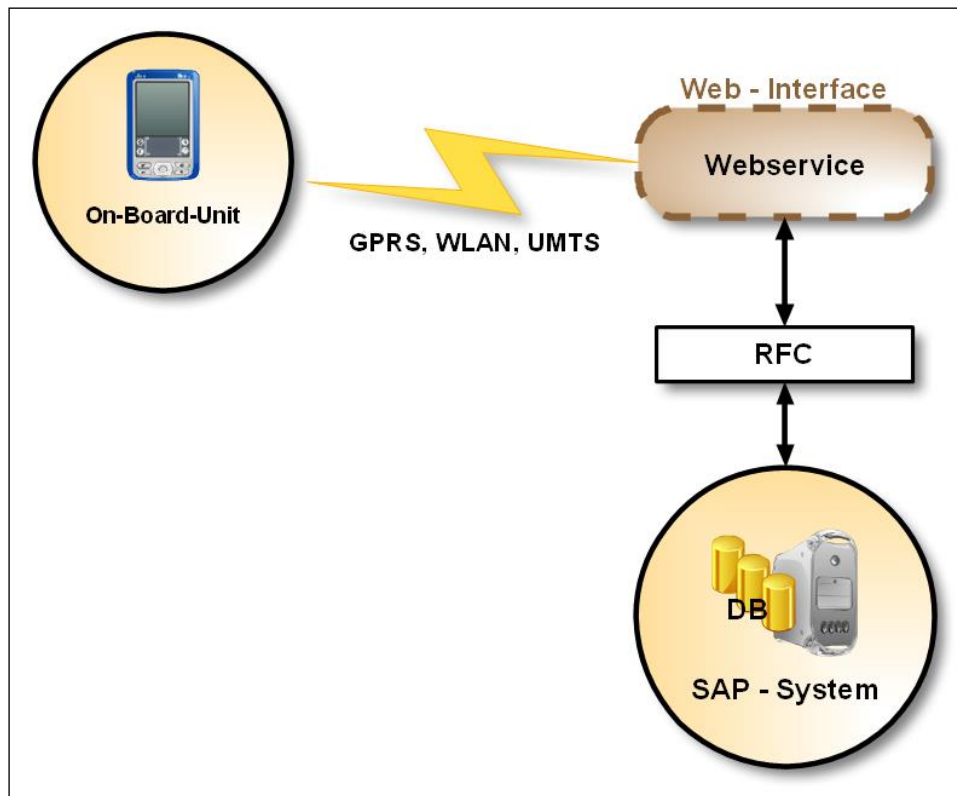


Figure 1: Overview communication between OBU and the SAP® system

2.2 Scope of the SAP® Mobile Order Management by PROLOGA

The SAP® *Mobile Order Management by PROLOGA* may support you in the following processes:

Order processing, assessment and resource planning

- Transmission of order data and possibility to print documents in vehicle
- Confirmation of performance data and capturing of services additionally rendered
- Return information of processing status

Container tracking:

- Capturing container processes in vehicle
- Capturing container filling level
- Displaying all container movements and the last known container location

Operational data acquisition:

- Capturing time of performance and mileage in vehicle
- Displaying and assessing vehicle performance
- Displaying all data on a digital map

Sending and receiving information

- Bi-directional connection between driver and operational headquarters
- Exchange of text messages

2.3 SAP® Mobile Order Management by PROLOGA - Components

The SAP® *Mobile Order Management by PROLOGA* is integral part of the SAP® Waste and Recycling and comprises of the following components:

Order management

The order management component provides you with an overview of all daily disposal orders and order items. You are able to allocate and transmit orders and items to a vehicle. Different symbols illustrate the current processing status of an order or order item (e.g. *new, started, and completed*).

Confirmation of performance data

Performance data captured on the route are automatically sent to the SAP® system after completing a waste disposal order or an order item. Additionally, the SAP® *Mobile Order Management by PROLOGA* provides several masks and other tools to check, approve and correct data or resolve conflicts resulting from such a transmission.

Container tracking

All captured container movements are displayed in this transaction. You may apply different filter criteria to track the life cycle of each single container. On customer request you are able to answer quickly to where a container is currently located or where a container was located at a certain time.

Additionally, the driver may enter comments when moving a container which enables you to optimize maintenance processes.

Operational/Event log

The operational log collects all relevant operations of a day and displays them in a clear and structured way. The log enables you to track your vehicles and the processing status of a disposal order or order item at all times.

Vehicle, software and master data management

Especially with large vehicle fleets it is important to maintain and configure all OBUs centrally. This includes the allocation of the OBUs to a vehicle, the provision of master data as well as new software configurations.

Basic configuration

Here you may define the master data that shall be available in the vehicle.

Administration

Here you may monitor the data connection between the SAP® system and the OBUs. Additionally, you may check how many vehicles are equipped with an OBU or how many vehicles are currently online. Moreover, an overview of data packages to be transmitted as well as of problems occurred is given. Therefore, if a system failure is assumed or data are missing, you should check this transaction at first.

Communication log

All data packages transmitted between the SAP® system and the OBUs are displayed in this transaction. While the communication log may be consulted for an enhanced error analysis it is not required to work off standard business processes.

3 Operation

3.1 General operation

SAP® operation standards apply for the handling of the *SAP® Mobile Order Management by PROLOGA*.

The following functions may be applied generally:



New/Create - creates a new entry



Edit/Change - the data of a record may be changed



View/Display - the data of a record are displayed



Delete - the entry will be deleted



New allocation - adds a subentry to a main entry



Delete allocation - deletes a subentry of a main entry



Expand/Maximize - additional fields will be displayed on a mask



Displays the dialog to start a new selection (not available in all transactions)



Displays/Hides map (if map is available)

In most areas a tree diagram was chosen to provide the user with a clear data overview. Whereas on the left screen side all equivalent elements are listed, a detailed view of a selected node is given on the right screen side (provided that detailed data are available).

3.1.1 Working with the tree structure

In order to open or close a node in a tree, click on the respective triangle symbol in front of the entry (using the left mouse button). After opening a node, all allocated child nodes will be displayed. (the triangle changes from pointing to the right to pointing downwards). A triangle in front of an entry always indicates that there are further data available.

The node is closed analogous to opening a tree node. Click on the triangle symbol pointing downwards in front of an entry (using the left mouse button). The symbol now turns from pointing downwards to pointing to the right. The subentries are not shown any longer. It is possible to close all nodes at once (see additional list functions in chapter 3.1.1.2).

When selecting a record in the tree structure on the left side, the detailed data of this record are displayed on the right screen side.

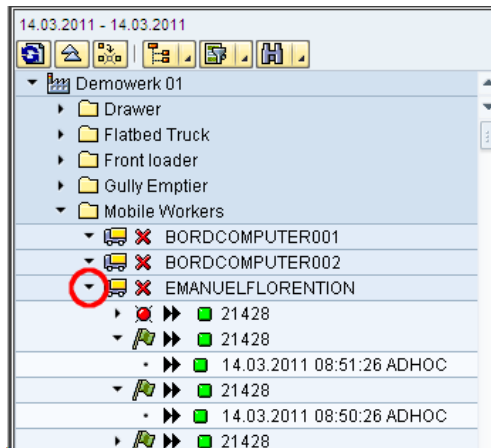


Figure 2: Open and close a tree node








3.1.1.1 Symbols

Different symbols are displayed in front of a data record on each level. These symbols illustrate the status of a record. While standard symbols are provided, they can be customized as well. See chapter 5 for all provided standard symbols.

3.1.1.2 Additional functions

Depending on the status different functions are provided in the tree structure. These functions are displayed in the function bar.



- | | | |
|---|--|--|
|  | <i>Update/Refresh</i> | updates display of data records after changes |
|  | <i>Close all nodes</i> | all nodes are closed |
|  | <i>Hide empty folders</i> | hides all child nodes that have no data allocated |
|  | <i>Select tree</i> | opens a menu to select an alternative tree view |
|  | <i>Filter</i> | clicking on the list next to the filter symbol opens a context menu where you can select from a list of default filter criteria. SAP® standard filter functionalities are available. |
|  | <i>Search</i> | clicking on the list next to the search symbol opens a context menu where you can select from a list of default search criteria. SAP® standard search functionalities are available. |
|  | <i>Activate/Deactivate expert mode</i> | you may activate/deactivate the expert mode for enhanced settings |

3.1.1.3 Context menu of tree

Clicking on a node with the right mouse button opens a context menu which provides general functions such as:

- *Cancel*

as well as context dependent functions, such as:

- *Refresh*
- *Transmit master data*

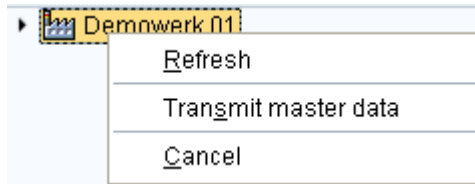


Figure 3: Context menu of a tree node

3.1.1.4 Display tree entries on map

If a geographical coordinate is assigned to a data record, there is a check box displayed in front of the record that can be ticked on or off. If it is ticked, the symbol in front of the record is displayed on a digital map (see Figure 4 and Figure 5).

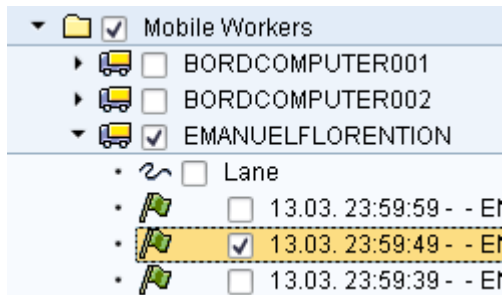


Figure 4: Check box in the tree



Figure 5: Displaying the order item on the map

3.1.2 Working with the map

The SAP® Mobile Order Management by PROLOGA provides several possibilities to display a digital map in order to show records in their geographical context, e.g. displaying the current position of a vehicle or containers or giving the information when and where a waste disposal order was received. The map display often provides the user with a quick and clear overview of all relevant data.

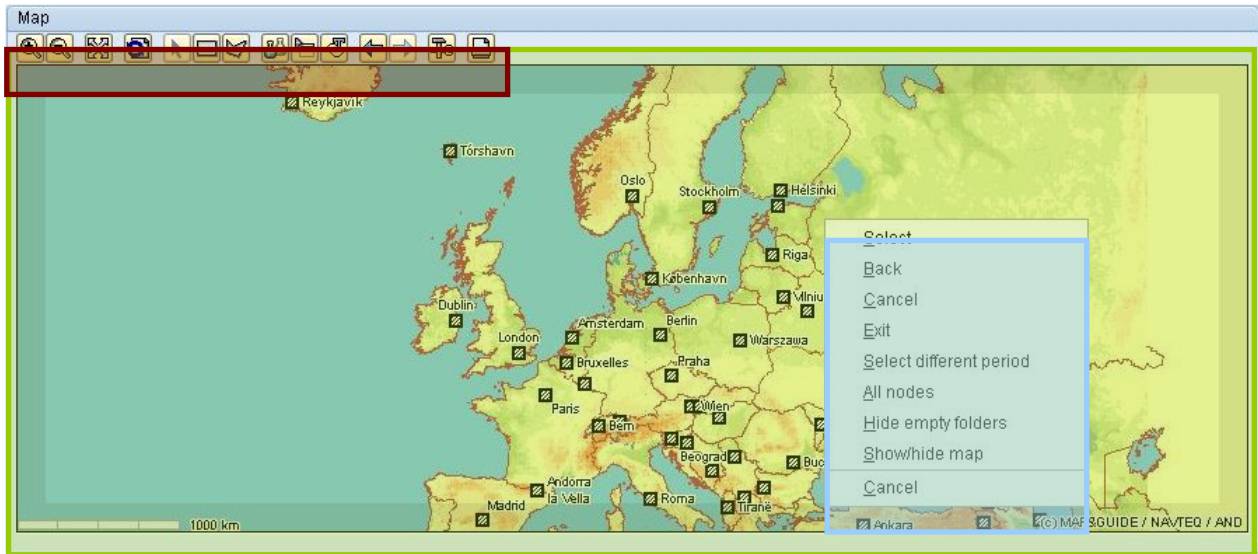















Figure 6: Map segment with menu

A map consists of a map menu (red shaded), the actual map (green shaded) and the context menu (blue shaded). See Figure 6.

The map menu lists the following functions:

-  *Zoom in* Displays a smaller map segment with more detailed information whereas the map center stays the same.
-  *Zoom out* Displays a larger map segment with less detailed information whereas the map center stays the same.
-  *Zoom out (max)* Displays the map in its maximum size.
-  *Refresh* Updates data on the map.
-  *Navigation* If you draw a rectangle on the map with the left mouse button, the map will be zoomed in to completely display the selected area.
-  *Select: rectangle* Drawing a rectangle on the map with the left mouse button selects all objects in this area.
-  *Select: polygon* Define a polygon area through clicking the left mouse button several times. The polygon is completed when you click with the left mouse button on the starting point. All symbols of this area are now marked.
-  *Grey in map* The map is displayed in grey for a better overview.
-  *.Display objects as points* Icons are displayed as points on the map.
-  *Display/hide caption* Displays or hides captions above the symbols.
-  *History back* The map segment that was shown before is displayed.
-  *History forward* The map segment that was revoked is now displayed again.
-  *Features* A dialog is displayed to define map settings.



Map settings should only be changed by your administrator



Print map segment

Prints the current map segment including all symbols and their captions.

You may navigate in 8 directions on the map. Therefore place the cursor in the grey shaded (see Figure 7, here orange shaded) periphery (map angle or map border) and click on the left mouse button. As soon as the navigation in the selected direction is possible the cursor shape changes to a wide arrow (see Figure 8).



Figure 7: Map segment (orange) used for navigation



Figure 8: Example of a displayed arrow indicating direction

Navigation

Activate the navigation mode. When clicking on the left mouse button on the map and simultaneously moving the mouse, a rectangle is drawn which defines the map segment to be shown next. The black frame of the rectangle defines the new map segment (see also Figure 9).



Figure 9: Applying mouse mode: navigation

3.2 Order management

(Transaction */N/WATP/BC_ORDER* – *Order management*)

All waste disposal orders and order items of the current day will be displayed in this transaction. You may allocate the orders and order items to a vehicle and transmit the respective data into the vehicle.

Different symbols illustrate the current status of an order or order item (e.g. *new*, *started*, and *completed*).

Next to orders and order items you may as well send text messages to your vehicles.

Moreover, you may display all geographical positions of your vehicles as well as single waste disposal order items on a map. The meaning of the symbols displayed in the tree is given in chapter 5.1.

This transaction is only applied in case you do not use the component *SAP® Dispatching & Planning by PROLOGA* which provides you with even more comprehensive functionalities.

3.2.1 General operation

In order to transmit a waste disposal order or an order item to a vehicle, select the key date in the initial dialog. Open the tree nodes until the vehicle to which the order is allocated is displayed. Select the waste disposal order and click on the right mouse button. A context menu will be displayed listing the function to send an order/item to a vehicle. In the same way you may as well call back an order or order item which was already sent to a vehicle.

To display the current vehicle position or the location of an order item on a digital map, tick the check box in front of the tree entry.

In order to send a message to a vehicle, select the respective vehicle, click on the right mouse button and choose the respective function from the context menu. A dialog opens where you may select your message from default entries or enter your message manually.

When starting the transaction a dialog opens where you have to define the date for which the waste disposal orders shall be displayed in the tree. (See also Figure 10).

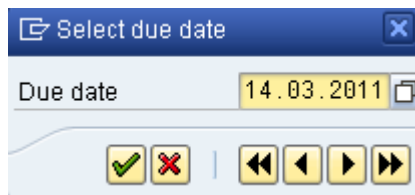


Figure 10: Initial dialog of the order management transaction

After confirming the date (green check mark), the main screen opens (see Figure 11) which is divided in 3 areas:

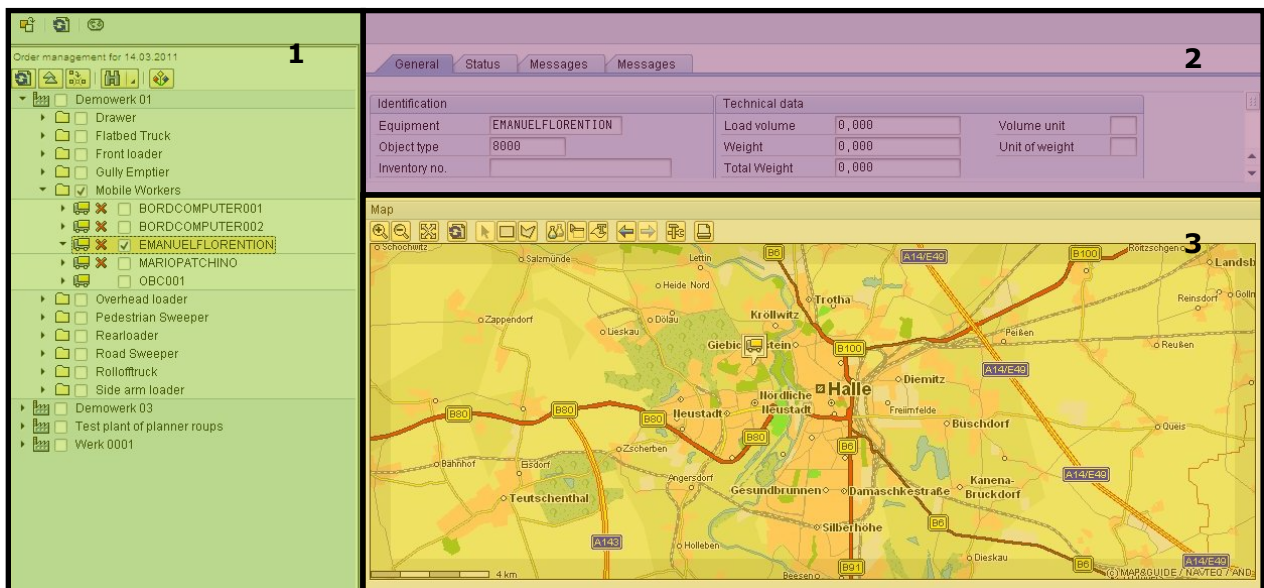


Figure 11: Structure of the main order management screen

1. Tree displaying container movements
2. Detailed information of the selected node
3. Map

3.2.2 Screen: Tree

The following hierarchy is displayed.

- <Plant>
- <Vehicle type>
- <Vehicle>
- <Waste disposal order>
- <Waste disposal order item>

Display of Plant and Vehicle type is depending on configuration.

The symbols used in the tree structure give you a quick overview of the status of a vehicle or waste disposal order. (See example in Figure 12).

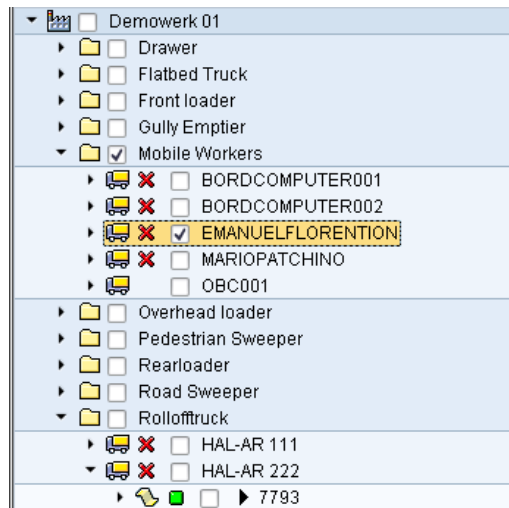


Figure 12: Tree structure in performance data confirmation

The meaning of the symbols is defined in chapter 5.1.

Context menu of the tree

Depending on the type of the selected entry the context menu provides the following functions:

<Vehicle type> level

- *Update/Refresh*
Updates the child nodes
- *Cancel*
Closes the context menu

<Vehicle> level

- *Update/Refresh*
Updates the child nodes
- *Send message*

This function opens a dialog where you can select or enter a text message to be sent to the vehicle. After entering and confirming the text, the message will be provided for transmission and transmitted during the next communication cycle.

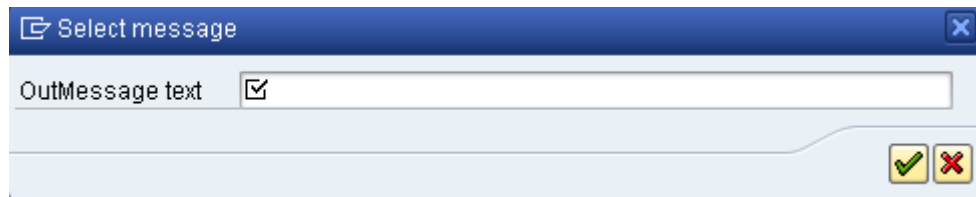


Figure 13: Dialog for entering a text message

- *Display position*
Ticks the check box in front of the node and displays the last known geographical position of the vehicle on the map
- *Update/Refresh status*
Updates status, i.e. geographical coordinates, mileage, etc.
- *Cancel*
Closes the context menu

<Waste disposal order> level

- *Update/Refresh*
Updates the child nodes
- *Send order*
Transmits the waste disposal order to the respective vehicle
- *Call back order*
The already transmitted waste disposal order is called back
- *Cancel*
Closes the context menu

<Waste disposal order item> level

- *Update/Refresh*
Updates the child nodes
- *Display item*
Ticks the check box in front of the node and displays the geographical position of the item
- *Send order item*
Transmits the order item to the respective vehicle
- *Call back order item*
The already transmitted waste disposal order item is called back

3.2.3 Screen: Detailed information

<Vehicle> level

- *Tab General*
Displays general vehicle data
- *Tab Status*
Displays last known vehicle status data
- *Tab Out-Messages*
Displays all messages that were sent to the vehicle on the selected date
- *Tab In-Messages*
Displays all messages that were received from a vehicle on the selected date

<Waste disposal order> level

- Tab *General*
Displays general waste disposal order data
- Tab *Key data*
Displays target and actual data

<Waste disposal order item> level

- Tab *General*
Displays general order item data
- Tab *Container*
Displays general container data
- Tab *Cleaning*
Displays general cleaning object data
- Tab *Bulk waste*
Displays general bulk waste data

3.2.4 Menu bar

Instead of using the function bar, you may call any function via the menu bar. Standard entries defined by the SAP® system will not be considered in the following description.



Figure 14: Menu bar of the order management

Order management → *Select date (SHIFT + F5)*

Here you can change the date for which the data shall be displayed

Order management → *Close/Exit (SHIFT + F3)*

Closes the transaction

Map → *Settings*

Opens the dialog to maintain the technical settings

Environment → *Communication Center*

Calls the transaction Communication log (see also chapter 3.9). This transaction may be used for an enhanced trouble shooting.

3.3 Confirmation of performance data

(Transaction /N/WATP/BC_CONFIRM – *Confirmation of performance data*)

Performance data captured on a route are automatically transmitted to the SAP® system after completing a waste disposal order or order item. Additionally, the *SAP® Mobile Order Management by PROLOGA* provides several masks and other tools to check, approve and correct data or resolve conflicts resulting from such a transmission.

3.3.1 General operation

If a driver completed a waste disposal order or order item, the captured data are transmitted to the SAP® system and cached. The status is set to *CREATED*.

At the end of the day the official in charge checks the acquired data regarding their correctness. Performance data that do not require manual corrections may then be set to the status *CHECKED* and will be automatically provided in the standard response transaction for further processing.

If the data have to be corrected manually, the official in charge may set the status to *TOREVISE*. This status enables you to create a correction data record and to enter the corrected data. After approving the corrected data record, the status can be set to *CHECKED* and the data are then automatically provided in the standard response transaction.

If several data records are captured for one disposal order or one order item or the captured data are erroneous in respect of content, the status *DISPUTED* is assigned. That means these data records must be checked. The official in charge may compare the captured data and create a correction record entering the summed up data. After approving the correction record (status *CHECKED*), the data records are set to status *RESOLVED*.

The different statuses are displayed in Figure 15.

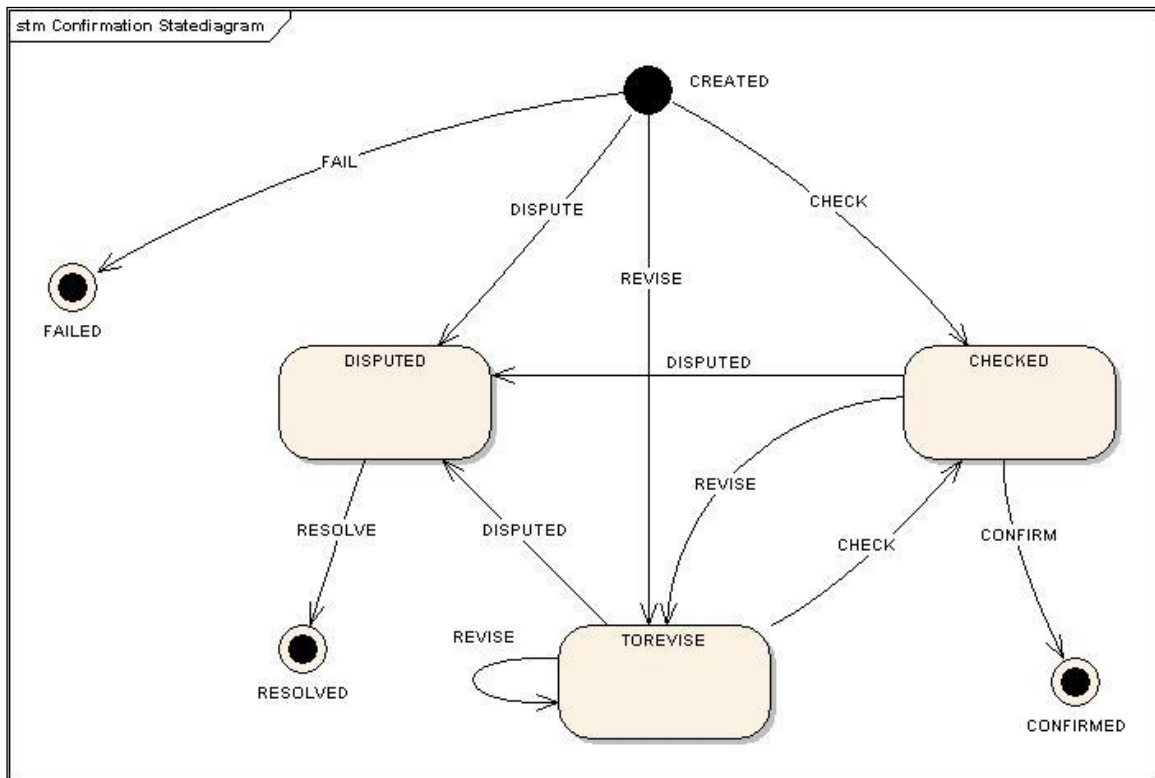


Figure 15: Order status during confirmation of performance data

The meaning of the status value is as follows:

CREATED

The data record was created (is valid for confirmation and correction records) and can be edited (correction records only).

DISPUTED

Multiple data records have been returned for the object selected in the tree (waste disposal order or item). The conflict has to be solved manually.

RESOLVED

The conflict has been solved by creating a correction record. All records with the status *DISPUTED* and the correction record *CHECKED* are listed under this category.

CHECKED

The confirmation or correction record was checked regarding content and can now be provided to SAP® Waste and Recycling.

TOREWISE

The correction record contains errors or other problems which require a revision or correction by the official in charge.

CONFIRMED

The performance data were provided for further processing in SAP® Waste and Recycling.

FAILED

Conflicts occurred but it is not possible to resolve these conflicts as other data records allocated to the same object are already set to the status *CONFIRMED* or *RESOLVED*.

When starting the transaction a dialog opens. Define the period and the planner group for which the waste disposal order shall be confirmed.

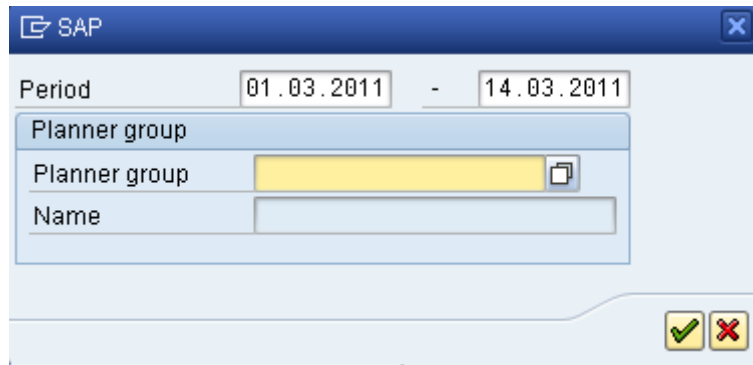


Figure 16: Confirmation of performance data

After saving the entries (green check mark), the main screen opens (Figure 17), which consists of the following 4 parts:

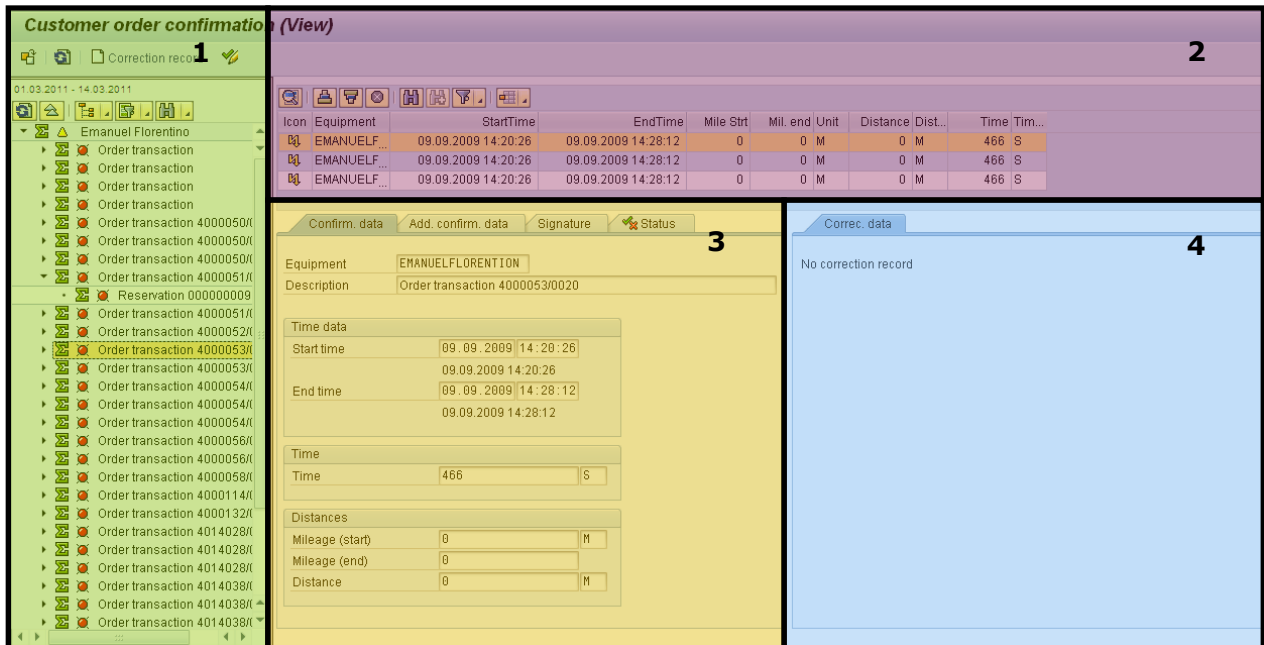


Figure 17: Screen structure of performance data confirmation

1. Tree displaying the waste disposal orders, items etc.

2. performance records allocated to the order/item selected in the tree
3. detailed data of a record
4. correction data

3.3.2 Screen: Tree

The data are displayed in the following hierarchy.

<Waste disposal order >
 <Waste disposal order item>
 <Customer service confirmation>

The symbols in front of the data records enable you to quickly realize whether performance data have already been transmitted for a data record or if conflicts occurred that have to be manually resolved. (See also Figure 18).

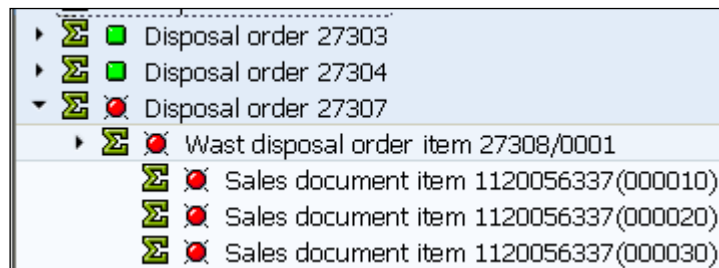


Figure 18: Tree structure of the performance data confirmation

The meaning of the symbols is explained in chapter 5.3.

Depending on the type of the selected entry the following functions are provided in the context menu:

<Disposal order>/<Order item>/<Customer service> level

- *Back*
Calls the former action
- *Cancel*
Closes the context menu
- *Close*
Closes the transaction
- *Select different period*
Opens a dialog to select another period
- *Update/Refresh*
Updates the child nodes
- *Start confirmation*
Confirms the waste disposal order (provided that status and data combination allows for a confirmation)
- *Close all nodes*
Closes all nodes of the tree

3.3.3 Screen: Performance records

The performance records of a selected tree entry are displayed. If you select an entry of the performance records its detailed data are displayed in (Screen: Detailed data of a performance record).

3.3.4 Screen: Detailed data of a performance record

The captured performance data of the selected record are displayed on several tabs to give a better overview. Tabs and their respective data differentiate depending on the selected entry in the tree on the left screen.

<Waste disposal order> level

- *Tab Confirmation data*
General confirmation data of the waste disposal order are displayed.
- *Tab Additional confirmation data*
Additional performance data of the waste disposal order. In editing mode (status *TOREVISE*) you may select one or more data entries and copy it to the correction record (*CTRL + SHIFT + F4*).
- *Tab Fuelling*
If the OBUs provide for data acquisitions regarding fuelling, the respective data are displayed on this tab. In *Edit* mode (status *TOREVISE*) you may select one or more data entries and copy it to the correction record (*CTRL + SHIFT + F4*).
- *Tab Status*
A history of all statuses of a waste disposal order is displayed. These data are for informative purposes only.

<Order item> level

- *Tab Confirmation data*
General confirmation data of the order item are displayed.
- *Tab Additional confirmation data*
Additional performance data of an order item are displayed. In editing mode (status *TOREVISE*) you may select one or more data entries and copy it to the correction record (*CTRL + SHIFT + F4*).
- *Tab Signature*
The customer signature is displayed. In editing mode (status *TOREVISE*) you may copy the signature to the correction record (*CTRL + SHIFT + F7*). In order to delete a signature from the correction record use *CTRL + SHIFT + F8*.
- *Tab Status*
A history of all statuses of an order item is displayed. These data are for informative purposes only.

<Service> level

- *Tab Confirmation data*
General confirmation data of the service are displayed.
- *Tab Additional confirmation data*
Additional performance data of the service are displayed. In editing mode (status *TOREVISE*) you may select one or more data entries and copy it to the correction record (*CTRL + SHIFT + F4*).
- *Tab Status*
A history of all statuses of a service is displayed. These data are for informative purposes only.

3.3.5 Screen: Correction data

While the captured data may only be displayed in Screen: Detailed data of a performance record, the data may be changed in the Correction data screen area provided that the status of the data records to be edited (*waste disposal order, order item or service*) is *TOREVISE*. Select a data record in the tree and click on the button *TOREVISE* or apply the respective hotkey. You are now able to activate the *Edit* mode (*F5*) and change the respective data.

The displayed tabs correspond with the tabs described in *Screen: Detailed data of a performance record* and depend on the data record selected in the tree.

Next to manually entering the values into the correction record, you are able to copy them from the selected performance record. Use the provided buttons (see also chapter 5.4). If it is a tab in list format (*Additional confirmation data, Fuelling*) select the lines to be copied. Regarding the tab *Signature* you may copy a signature (*CTRL + SHIFT + F7*) to the correction record or delete an already copied signature (*CTRL + SHIFT + F8*).

After you have finished the data correction, change the status of the record to *CHECKED*. The data record can now be provided for further processing in *SAP® Waste and Recycling*.

3.3.6 Menu bar

The menu changes according to the selected tree node. The first entry in the menu illustrates the level you are currently working in:

<i>Confirmation</i> →	<i>No nodes</i>
<i>Route confirmation</i> →	<i>Route confirmation level</i>
<i>Order confirmation</i> →	<i>Order confirmation level</i>
<i>Service confirmation</i> →	<i>Service confirmation level</i>

Standard entries given as default values by SAP® will not be considered in the following description.



Figure 19: Menu bar of the route confirmation

No nodes

- *Confirmation* → *Select different period (SHIFT + F5)*
Opens the dialog where you can select the period and the planner group
- *Confirmation* → *Cancel (SHIFT + F3)*
Closes the transaction
- *Edit* → *Start confirmation process (CTRL + F2)*
Transfers all provided waste disposal orders to *SAP® Waste and Recycling*
- *Edit* → *Cancel (F12)*
Cancels the current procedure and closes the transaction

<Waste disposal order> level

- *Route confirmation* → *Select different period (SHIFT + F5)*
Opens a dialog to select another date or planner group
- *Route confirmation* → *Edit/Change (F5)*
Activates editing mode provided that status of data record is *TOREVISE*
- *Route confirmation* → *Save*
Saves all changed data and deactivates editing mode
- *Route confirmation* → *Update/Refresh (SHIFT + F8)*
Updates display
- *Route confirmation* → *Close/Exit (SHIFT + F3)*
Closes the transaction
- *Edit* → *Edit/Change (F5)*
Activates editing mode provided that the status of the data record is *TOREVISE*
- *Edit* → *Create correction record*

- Creates a new correction record.
- *Edit* → *Set to CHECKED* (CTRL + SHIFT + F12)
Changes the status to *CHECKED*
- *Edit* → *Set to TOREWISE*
Changes the status to *TOREWISE*
- *Edit* → *Copy selected confirmation data* (CTRL + SHIFT + F4)
Copies the selected confirmation data into the correction record
- *Edit* → *Copy fuelling*
Copies the selected fuel data into the correction record
- *Edit* → *Delete fuelling*
Deletes all fuelling data from correction record
- *Edit* → *Confirm route* (CTRL + F1)
Provides waste disposal order for further processing in *SAP® Waste and Recycling*.
- *Edit* → *Start confirmation process* (CTRL + F2)
Transmits all provided waste disposal orders to *SAP® Waste and Recycling*
- *Edit* → *Cancel* (F12)
Cancels the current operation and closes the transaction

<Order item> level

- *Order confirmation* → *Select different period* (SHIFT + F5)
Opens a dialog to select another date or planner group
- *Order confirmation* → *Edit/Change* (F5)
Activates editing mode provided that the status of the data record is *TOREWISE*
- *Order confirmation* → *Save*
Saves all changed data and deactivates editing mode
- *Order confirmation* → *Update/Refresh* (SHIFT + F8)
Updates display
- *Order confirmation* → *Close/Exit* (SHIFT + F3)
Closes the transaction

- *Edit* → *Edit/Change* (F5)
Activates editing mode provided that status of data record is *REVISION*
- *Edit* → *Create correction record*
Creates a new correction record
- *Edit* → *Set to CHECKED* (CTRL + SHIFT + F12)
Changes the status to *CHECKED*
- *Edit* → *Set to TOREWISE*
Changes the status to *TOREWISE*
- *Edit* → *Copy selected confirmation data* (CTRL + SHIFT + F4)
Copies the selected confirmation data into the correction record
- *Edit* → *Copy signature* (CTRL + SHIFT + F7)
Copies the selected signature to the correction record
- *Edit* → *Delete signature* (CTRL + SHIFT + F8)
Deletes the signature from the correction record
- *Edit* → *Cancel* (F12)
Cancels the current operations and closes the transaction

<Service> level

- *Service confirmation* → *Select different period* (SHIFT + F5)

- Opens a dialog to select another date or planner group
- *Service confirmation* → *Edit/Change* (F5)
Activates editing mode provided that the status of the data record is *TOREVISE*
- *Service confirmation* → *Save*
Saves all changed data and deactivates *Edit* mode
- *Service confirmation* → *Update/Refresh* (SHIFT + F8)
Updates display
- *Service confirmation* → *Close/Exist* (SHIFT + F3)
Closes the transaction

- *Edit* → *Edit/Change* (F5)
Activates editing mode provided that the status of the data record is *TOREVISE*
- *Edit* → *Create correction record*
Creates a new correction record
- *Edit* → *Set to CHECKED* (CTRL + SHIFT + F12)
Changes the status to *CHECKED*
- *Edit* → *Set to REVISION*
Changes the status to *REVISION*
- *Edit* → *Copy selected confirmation data* (CTRL + SHIFT + F4)
Copies the selected confirmation data into the correction record
- *Edit* → *Cancel* (F12)
Cancels the current operations and closes the transaction

3.4 Container tracking

(Transaction /N/WATP/BC_CONTMOVE – Container tracking)

All captured movements of your containers will be displayed in this transaction. You may apply different filter criteria and therefore track the life cycle of each single container. On customer request or disputes you are able to immediately provide information e.g. as to where a container is currently located or was located at a certain time.

Additionally, you may optimize maintenance processes as the driver may enter comments e.g. to the state a container is in.

3.4.1 General operation

Each time a container is moved, the data will be stored on the OBU. Next to container, time and geographical position the driver may enter additional data e.g. transaction type, filling level or other comments.

After completing data entrance, the data are transmitted to the SAP® system and are available for analysis.

The container tracking transaction provides you with two different views on the data. Depending on the view that was used last time, different initial dialogs may open:

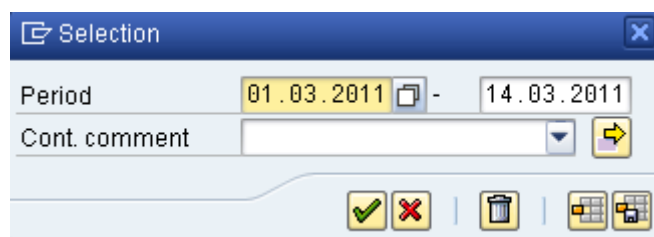


Figure 20: Dialog of container tracking (Container comments)

Select the *Period* and the *Cont. comment* to be displayed in order to pre-filter the data stock. If you do not want to filter for a certain comment, just leave this field blank (See Illustration 20).



Figure 21: Dialog of container tracking (Container movements)

Select the *Period*, *Service Type* and the *Filling level* to be displayed in order to pre-filter the data stock. If you do not want to filter for the service type or the filling level, just leave the according fields blank.

After confirming the entered data (green check mark), the main screen opens (Figure 22), which provides three data areas:

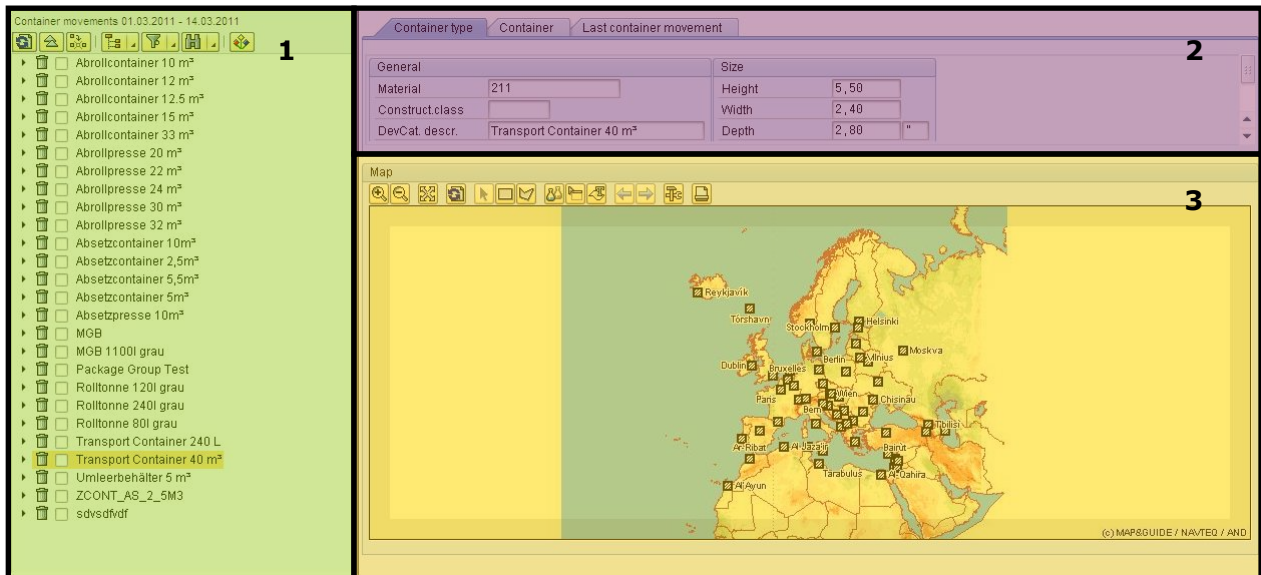


Figure 22: Screen structure of the container tracking

1. Tree listing container movements
2. Detailed data of the selected node
3. Map

3.4.2 Screen: tree

This area provides two different tree views (see also chapter 3.4.2.1 and 3.4.2.2), which you may select through the function button above the tree (see also chapter 3.1.1).



- Switches between the different tree views

For a better overview it is recommended to hide empty folders.



- Hides empty container type folders

The symbols are described in chapter 5.5.

3.4.2.1 Tree Container movements

This tree view displays all container movements of the selected period. It is structured as follows:

<Container type>
<Container>
 <Last geographical position>
 <Service type>

The last geographical position must be activated in context menu

Depending on the type of the selected entry the following functions are provided in the context menu:

<Container type> level

- *Update/Refresh*
Updates the child nodes
- *Display last position of all containers*
Displays the last known position of all containers of the selected container type on the map
- *Hide last position of all containers*
The containers of the selected container type will not be displayed on the map any longer
- *Cancel*
Closes the context menu

<Container> level

- *Update/Refresh*
Updates the child nodes
- *Display last position*
Displays the last known position of this container on the map
- *Cancel*
Closes the context menu

<Last position> level

- *Hide*
The container is no longer displayed on the map
- *Display position*
The map view is changed. The position is now displayed in the center of the map
- *Cancel*
Closes the context menu

3.4.2.2 Tree Container comments

This tree view displays all comments that a driver entered for a container in the selected period. It is structured as follows:

<Container type>
<Container>
 <Comment>

Depending on the type of the selected entry, the following functions are available in the context menu:

<Container type> level

- *Update/Refresh*

- Updates the child nodes
- *Display last position of all containers*
Displays the last known position of all containers of the selected container type on the map
- *Hide last position of all containers*
The containers of the selected container type will not be displayed any longer on the map
- *Cancel*
Closes the context menu

<Container> level

- *Update/Refresh*
Updates the child nodes
- *Display last position*
Displays last known position of the container on the map
- *Cancel*
Closes the context menu

<Comment> level

- *Update/Refresh*
Updates the child nodes
- *Display position*
The map view is changed. The position is now displayed in map center
- *Cancel*
Closes the context menu

3.4.3 Screen: Detailed data

Detailed data of the selected tree entry are displayed in this area. Extent and manner of the displayed data depend on the selected entry.

<Container type> level

- Tab *Container type*
Displays the technical data of this container type.
- Tab *Container*
Lists all containers of the selected container type.
- Tab *Last container movement* (Tree Container movement)
Lists the last known container movement of the containers allocated to the selected container type. You may sort or filter data.
- Tab *Container comment* (Tree Container comment)
Lists the comments to the containers in the selected period. You may sort or filter data.

<Container> level

- Tab *Container*
Displays the technical container data.
- Tab *Last container movement* (Tree Container movement)
Lists all container movements of the selected container. You may sort or filter data.
- Tab *Comments* (Tree Container comments)
Displays all comments captured for this container in the selected period.

<Container movement> level

Detailed data of the selected container movement are displayed.

<Container comment> level

Contains detailed information on the selected comment allocated to a container.

3.4.4 Screen: Map

If you tick a container movement or a container comment in the tree, the allocated symbol will be displayed on the map. For more information on using the map see chapter 3.1.2.

3.4.5 Menu bar

Instead of using the function bar, you may call any function via the menu bar. Standard entries defined in the SAP® system will not be considered in the following description.



Figure 23: Menu bar of the container history

Container history → Select different period (*SHIFT + F5*)

Opens a dialog where you can enter another period or filter criteria

Container history → Close (*SHIFT + F3*)

Closes transaction

Map → *Settings*

Opens a dialog to maintain the settings of the technical details regarding the map integration.

Environment

Calls the transaction Communication log (see also chapter 3.9). This transaction may be used for an enhanced trouble shooting.

3.5 Event log

(Transaction */N/WATP/BC_EVENT* – *Event log*)

The event log collects all relevant daily operations (events). Based on the collected data you are able to track e.g. the location of a vehicle at a certain time and the processing status of a waste disposal order or item.

3.5.1 General operation

All events that are captured by the *SAP® Mobile Order Management by PROLOGA* are recorded with a time stamp and – if available – a geographical coordinate.

After selecting the period to be considered, the events are displayed in a tree or on the map.

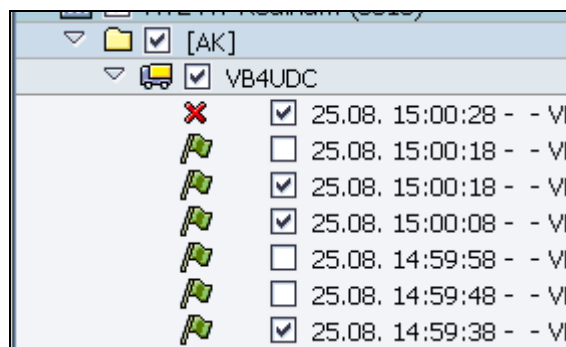


Figure 24: Events in the tree to be displayed on the map

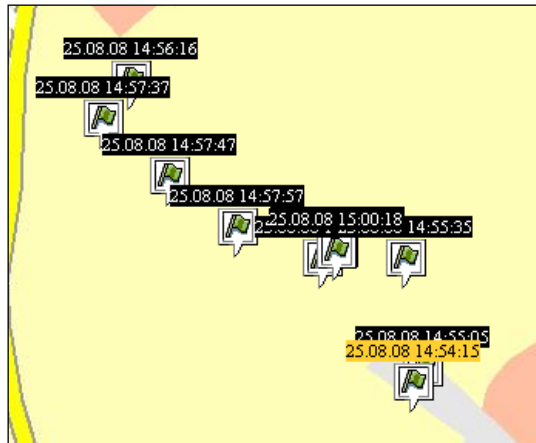


Figure 25: Displaying events on the map

When you link the geographical positions of all events the driven route will be displayed in color. You may allocate different colors to the different lanes.



Figure 26: Displaying a lane in the event log

After starting the transaction a dialog opens. Select the period to be displayed. Additionally, you may enter a signal type category in order to pre-filter the event data.

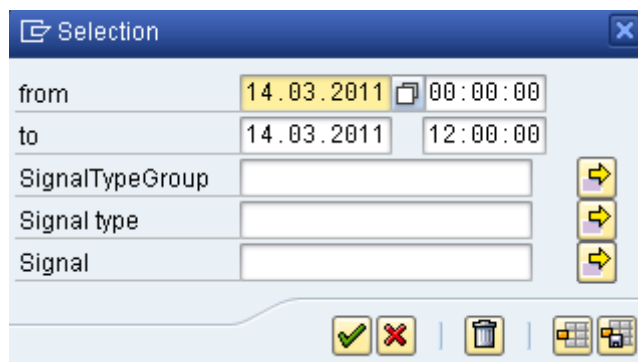


Figure 27: Dialog - Event log

After confirming the entry (green check mark), the main screen opens (Figure 28). The screen is structured in three areas:

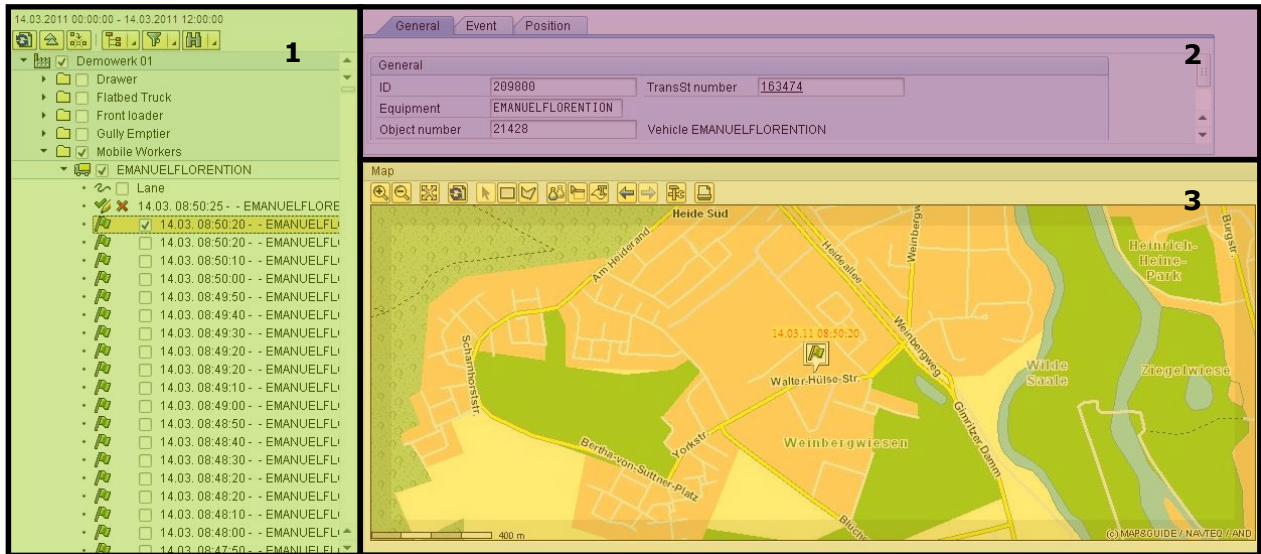


Figure 28: Screen structure event log

1. Tree displaying events
2. Detailed data of the selected node
3. Map

3.5.2 Screen: Tree

Two different tree views are provided (see also chapter 3.5.2.1 and 3.5.2.2), which you may select through the function button above the tree (see also chapter 3.1.1).



- Switches between the tree views

It is recommended to hide empty folders for a better overview.



- Hides empty container type folders

The meaning of the symbols applied in the tree is explained in chapter 5.5.

3.5.2.1 Tree Events (Vehicle)

The events are grouped according to vehicle data in this tree. The following structure is provided:

- <Plant>
- <Vehicle type>
- <Vehicle>
- <Lane>
- <Event>

The visibility of plants and vehicle type is depending on the configuration.

The lane has to be activated in the context menu

Depending on the type of the selected entry, the following functions are provided in the context menu:

- <Plant>/<Vehicle type> level
 - *Select*
 - Selects the current node

- *Back*
Same function as *back* button (*F3*) in menu bar
- *Cancel*
Same function as *cancel* button (*F12*) in menu bar
- *Close*
Same function as *close* button (*SHIFT+F3*) in menu bar
- *Select different period*
Opens initial dialog
- *Close all nodes*
Closes all nodes
- *Hide empty folders*
Hides all nodes that have no child nodes
- *Display/hide map*
Displays or hides map

<Vehicle> level

- *Update/Refresh*
Updates the child nodes
- *Display lane*
Adds the new tree node *lane* allocated to a vehicle. Connects all known geographical positions in the selected period and displays it as lane on the map
- *Allocate color*
You may allocate a pre-defined color to a lane or select a color from the color selection dialog

<Lane> level

- *Hide*
The lane is no longer displayed on the map
- *Cancel*
Closes the context menu

<Event> level

- *Display position*
Changes map view so that position is displayed in map center
- *Cancel*
Closes the context menu

3.5.2.2 Tree Events (chronological)

The events are grouped as to their chronological occurrence in this tree. The following structure is provided:

<Year>

<Month>

<Day>

<Plant>

<Vehicle type>

<Vehicle>

<Lane>

<Event>

The visibility of Plant and Vehicle type is depending on the configuration.

The lane has to be activated in the context menu.

Context menu

Depending on the selected entry the following functions are provided in the context menu:

<Year>/<Month>/<Day>/<Plant>/<Vehicle type> level

- *Select*
Selects the current node
- *Back*
Same function as *back* button (*F3*) in menu bar
- *Cancel*
Same function as *cancel* button (*F12*) in menu bar
- *Close*
Same function as *close* button (*SHIFT+F3*) in menu bar
- *Select different period*
Opens initial dialog
- *Close all nodes*
Closes all nodes
- *Hide empty folders*
Hides all nodes that have no child nodes
- *Display/hide map*
Displays or hides map

<Vehicle> level

- *Update/Refresh*
Updates the child nodes
- *Display lane*
Adds the new tree node *lane* allocated to a vehicle. Connects all known geographical positions in the selected period and displays it as lane on the map
- *Allocate color*
You may allocate a pre-defined color to a lane or select a color from the color selection dialog

<Lane> level

- *Hide*
The lane is no longer displayed on the map
- *Cancel*
Closes the context menu

<Event> level

- *Display position*
Changes map view so that position is displayed in map center
- *Cancel*
Closes the context menu

3.5.3 Screen: Detailed data

Detailed data of the selected tree entry are displayed in this area. Extent and manner of the displayed data depend on the selected entry. If there aren't any detailed data available this screen will not be displayed.

<Vehicle> level

- Tab *Vehicle*
Displays technical vehicle data.
- Tab *Events*
Lists all events allocated to the selected vehicle
- Tab *Last container movements* (if tree container movements is selected)
Lists the last known container movement of all containers allocated to the selected container type. You may sort and filter data.
- Tab *Container comments* (if tree container comments is selected)
Displays all container comments of the container in the selected period.

<Event> level

- Tab *General*
Displays the technical data of an event. For diagnostic purposes the transfer status number allows for a forward navigation into the transaction `/N/WATP/BC_CC`.

3.5.4 Screen: Map

If you tick an event in the tree, the respective symbol will be displayed on the map. For further instruction on map usage see also chapter 3.1.2.

3.5.5 Menu bar

Instead of using the function bar, you may call any function via the menu bar. Standard entries defined by the SAP® system will not be considered in the following description.



Figure 29: Menu bar event history

Event history → *Select different period (SHIFT + F5)*

Opens a dialog where you can enter another period or filter criteria

Event history → *Close (SHIFT + F3)*

Closes transaction

Map → *Settings*

Opens a dialog to maintain the settings of the technical details regarding the map integration.

Environment → *Communication center*

Calls the transaction Communication log (see also chapter 3.9). This transaction may be used for an enhanced trouble shooting.

3.6 Vehicle, software and master data management

(Transaction `/N/WATP/BC_OBUMAN` - *Vehicle, software and master data management*)

Especially with large vehicle fleets it is important to maintain and configure all OBUs centrally. This includes the allocation of the OBUs to a vehicle, the provisions of master data as well as new software configurations.

3.6.1 General operation

After selecting the working environment, choose from one of the three provided tree views (*displaying vehicles*, *allocate a new software version to vehicles* or *provide master data for vehicles*). The current data stock in the vehicles will be provided in the different views as well.

When starting the transaction, a dialog opens. Select your working environment. The working environment defines which vehicle or plant data you are allowed to change.

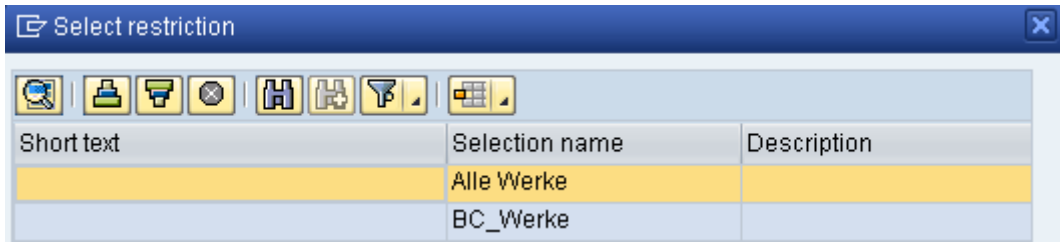


Figure 30: Selecting work environment

After confirming the entries (green check mark), the main screen opens. At first, select the category (*vehicles, software, master data*) that you want to maintain.



Figure 31: Category selection

The screen is divided in two areas which will be explained in the following.

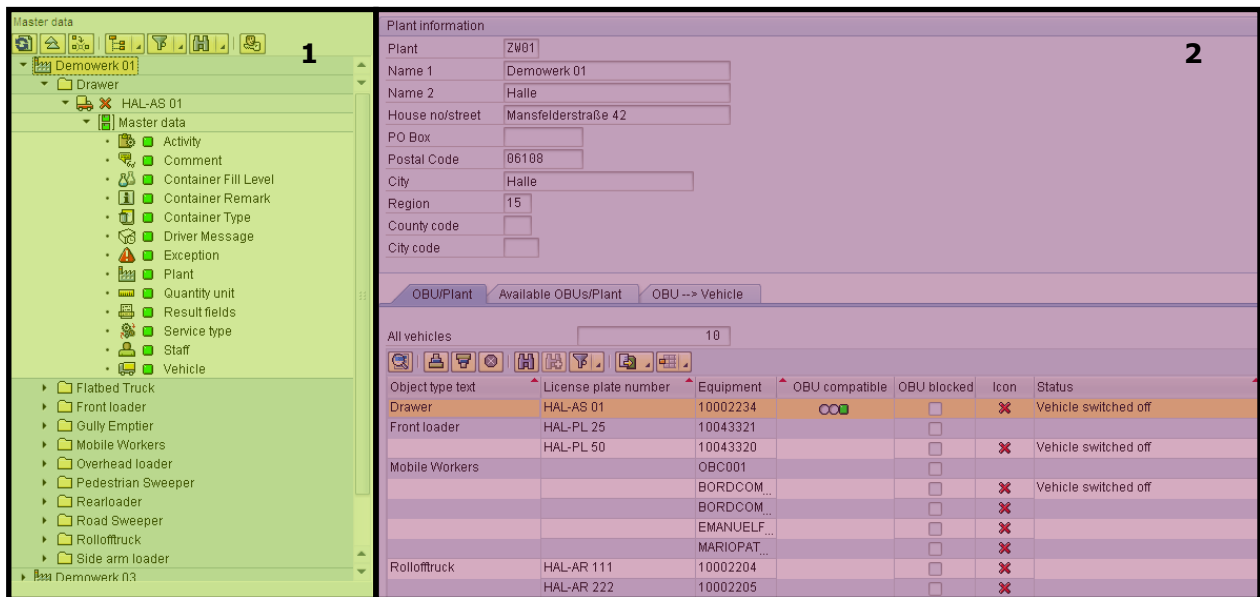


Figure 32: General structure

1. Tree (node)
2. Detailed data of a selected node

3.6.2 Vehicle management

This area provides an overview of your vehicle fleet. You may define if a vehicle can be equipped with an on-board unit (OBU) or allocate an OBU to a vehicle. You may as well block communication between an OBU and the SAP® system, e.g. in case the OBU has been stolen.

OBU compatible and Allocation of OBUs

This chapter refers often to OBU compatible vehicles and vehicles with allocated OBU. Please, note the following explanation:

Before a vehicle may be used in the *SAP® Mobile Order Management by PROLOGA*, the vehicle must be equipped with an OBU and the OBU must be allocated to the vehicle in the SAP® system. In order to support this installation process, all vehicles that can be equipped with an OBU will be marked as OBU compatible in the system. The technician responsible for equipping the vehicles with OBUs is now able to select and allocate the respective vehicle when installing an OBU in the vehicle. After allocating the OBU to a vehicle, the vehicle can be processed in *SAP® Mobile Order Management by PROLOGA*.

Sometimes – from an organizational point of view - it makes no sense to allocate an OBU directly in the vehicle. Therefore, the allocation can be done directly in the SAP® system as well.

The meaning of the symbols displayed in the trees and masks are explained in chapter 4.5.

3.6.2.1 Screen: Tree

The tree is structured as follows:

<Plant>
<Vehicle type>
<Vehicle>

The visibility of plant and vehicle type depends on configuration.

Depending on the selected entry the following functions are provided in the context menu:

<Plant> level

- *Update/Refresh*
Updates the child nodes
- *Hide empty folders*
Hides empty folders
- *Cancel*
Closes the context menu

<Vehicle type> level

- *Update/Refresh*
Updates the child nodes
- *Vehicle on-board Unit compatible*
The allocated vehicles are marked as OBU compatible
- *Allocate on-Board Units automatically*
The allocated vehicles are marked as OBU compatible and a unit is allocated to each vehicle provided that the OBUs were created as equipment in the system beforehand.
- *Cancel*
Closes the context menu

<Vehicle> level

- *Change MacID*
Changes the unique OBU-ID. Based on this ID the OBU can be identified unambiguously and therefore can be blocked.
- *Block vehicle*
Blocks a vehicle (or rather the allocated OBU) for communication
- *Unblock vehicle*
Communication is again possible

- *Generate master data for vehicle*
Generates the master data for the selected vehicle anew
- *Vehicle as OBU compatible*
The selected vehicles are marked as OBU compatible
- *Vehicle not OBU compatible*
The allocation as OBU compatible is deleted
- *Allocate OBU*
Marks the vehicle as OBU compatible and allocates an OBU provided that the OBU was created as equipment in the system beforehand.
- *De-allocate OBU*
Deletes the allocation of the OBU
- *Cancel*
Closes the context menu

3.6.2.2 Screen: Detailed data

Depending on the selected node, different data are displayed on the right screen side.

<Plant> level

- *Plant data*
Displays detailed plant data.
- *Vehicle list*
Displays status of all vehicles allocated to the selected plant.

<Vehicle type> level

- *Vehicles (total)*
Displays status of all vehicles allocated to this vehicle type and plant.
- *Tab General*
Displays general data to the selected vehicle.
- *Tab OBU*
Displays data of the OBU allocated to the selected vehicle.
- *Tab Software*
Displays an overview of the current software version of the OBU allocated to the selected vehicle.
- *Tab Geo data*
Displays the last known geographical position of the selected vehicle.

<Vehicle> level

Sums up the most important vehicle data.

3.6.3 Software management

On every OBU a dedicated application is running which is responsible for receiving and displaying the orders and provides functionality to work on these orders. Sometimes it is necessary to install a new version of this application due to new functional requirements or to fix errors.

Updating this application is a critical procedure, as

- Generally, you are faced with a large number of vehicles (OBUs) that have to be considered
- the vehicles will not be at the yard/depot all at once
- an error might easily result in the breakdown of the unit which might only be repaired in the garage
- a breakdown of an OBU results in a major manual effort in order to execute orders.



Due to the above mentioned and in case that at one point you are not 100% sure how to proceed, it is strongly recommended to contact PROLOGA. Otherwise major errors might occur.

Software versions and OBU profiles

The terms software version and OBU profile will be repeatedly referred to in the following chapters. Therefore, the following descriptions shall apply:

Software version: each time the application has changed, your vendor will provide you with a new version. This updated software version is marked by a so-called version number consisting of generally three digits. The structure of these three digits is as follows: MainVersion.SubVersion.HotfixVersion. For example, the version 2.1.2 stands for the Main version 2, Subversion 1 and Hotfix version 2. This structure is as well displayed in the software node.

OBU profile: The allocation of new software versions to vehicles (or rather OBUs) has to be planned carefully. It is recommended to test the new software on selected vehicles before it is provided to the complete vehicle fleet. Otherwise, it might be wise to provide new software versions only to certain vehicle categories (e.g. roll-off container). For these purposes, the *SAP® Mobile Order Management by PROLOGA* enables you to create different OBU profiles (groups), to which you might allocate different vehicles. If a new software version is available, you can allocate it to an OBU profile. The vehicles allocated to this profile will now have access to the new software version.

3.6.3.1 Create software update

If you have received a new software version for the OBU, you have to create it in the system at first. Therefore, go to the node *Software* and click on the button *Create software update* (F7) (see also Figure 33).

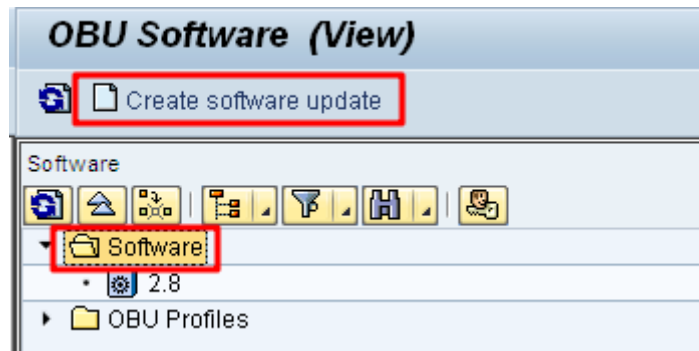


Figure 33: Create software update

Enter or select the file path of the new software files in the opening dialog. The check box *Frontend* indicates if the path is located on the work station (front end) or on the server. The basic setting is hereby the local work station (Figure 34).

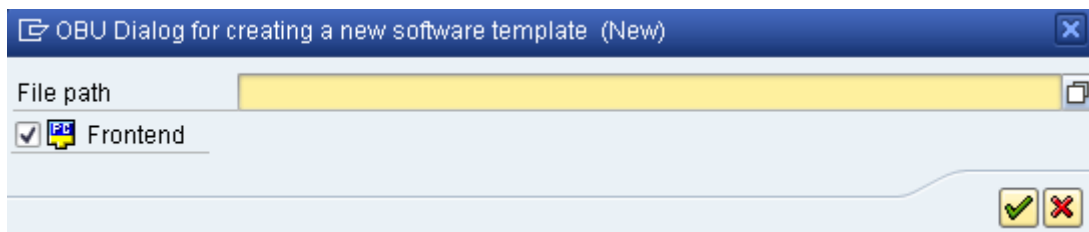


Figure 34: Select file path

One of the files that were delivered with the new software version is named *version.txt* which contains the version of the software. This file is used to integrate the update in the tree.

3.6.3.2 Create OBU profile

Before you can allocate a new software version to a vehicle, you have to assign the vehicle to a profile.

In order to create a profile, select the node *OBU profile* in the tree and click on the function button *Create profile* (*SHIFT +F9*) (see also Figure 35).



Figure 35: Create OBU profile

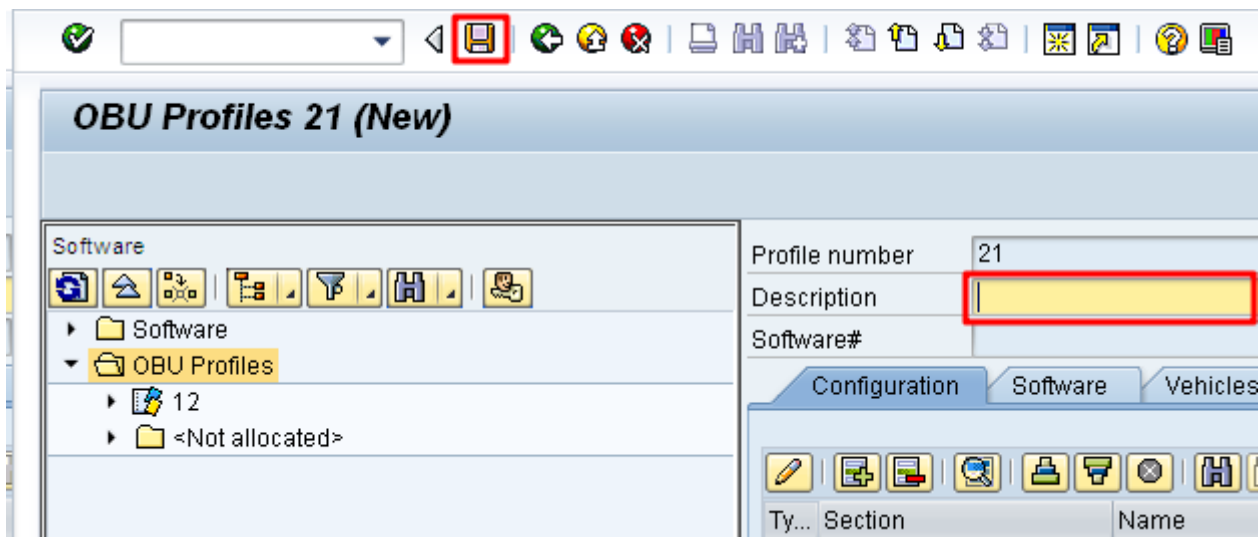


Figure 36: Save OBU profile

Enter a description with an unambiguous meaning and save the profile.

3.6.3.3 Allocate vehicle(s) to an OBU profile

Each vehicle for which a software update shall be provided has to be allocated to one profile. Open the node *<Not allocated>* and select the vehicle or the vehicle type that you want to allocate to a profile. Click on the button *Profile assignment* (*SHIFT+F11*) (see also Figure 37).

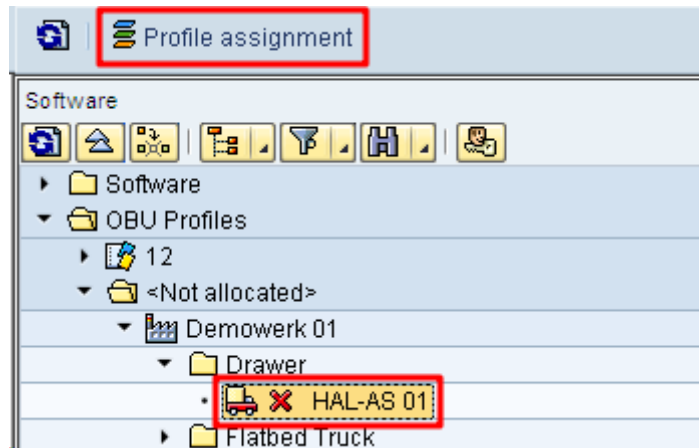


Figure 37: Allocate vehicle to an OBU profile

A dialog opens. Select the required profile (*Profile number*) or delete an existing allocation (*De-allocate profile*).

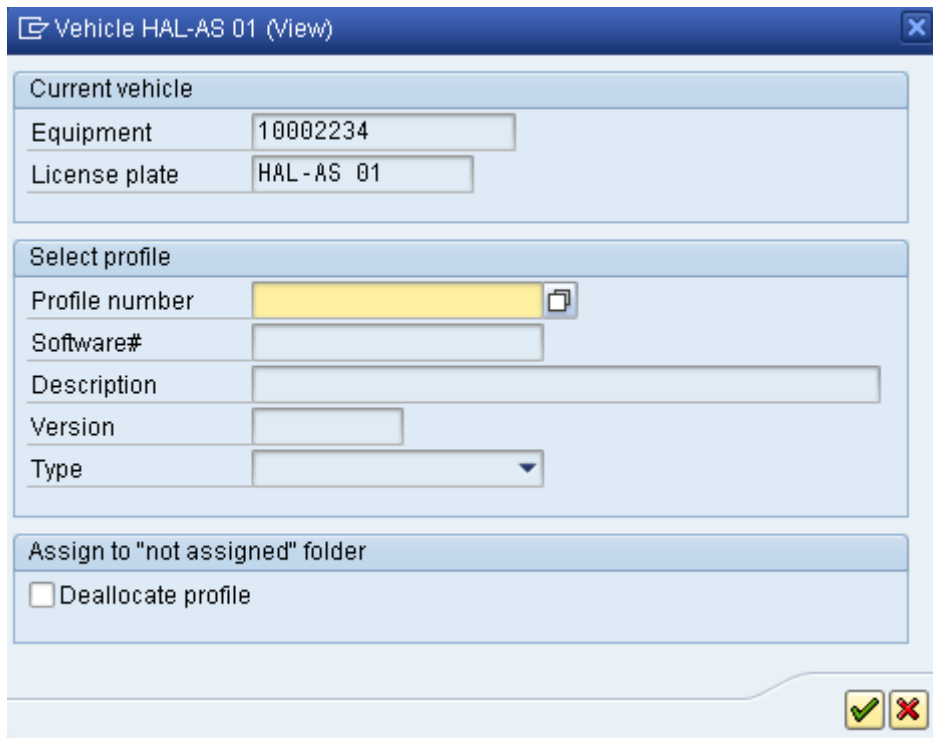


Figure 38: Select OBU profile

In the same way you may re-allocate a vehicle to a new profile or delete a profile allocation. Instead of using the function buttons you can as well use the Drag&Drop function to allocate a vehicle to a profile. Therefore, select a vehicle or vehicle type with the left mouse button, drag the record to the required profile and drop it (releasing the left mouse button).

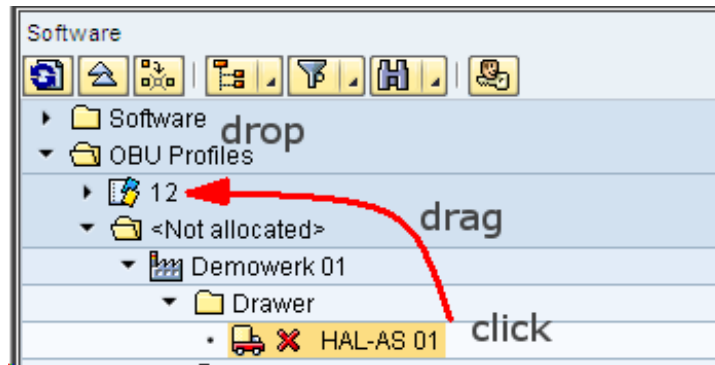


Figure 39: Allocate a vehicle to an OBU profile via drag and drop

3.6.3.4 Allocate software to an OBU profile

After you have maintained the OBU software in the system, created the respective OBU profiles and allocated the vehicles, you can now allocate the software version to a profile.

Therefore, select a software version in the tree and click on the function button *Profile assignment* (CTRL+F9).

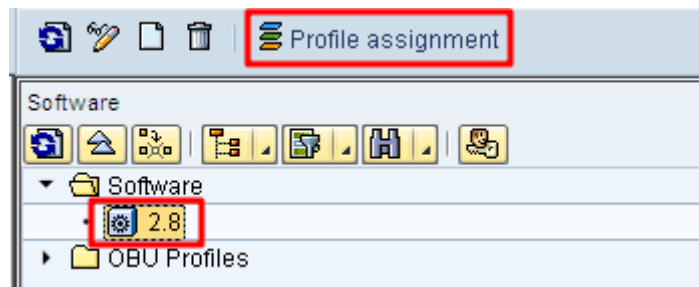


Figure 40: Allocate software version to an OBU profile

A dialog opens where you can select an OBU profile.

Instead of using the function buttons you can as well use the Drag&Drop function to allocate a software version to a profile.

Therefore, select a software version with the left mouse button, drag the record to the required profile and drop it (releasing left mouse button).

3.6.3.5 Transmit software to vehicles

After you have allocated a software version to an OBU profile, you can transmit it to all vehicles allocated to this profile.

Select the profile in the tree and click on the button *Allocate software* (F9) (see also Figure 35).

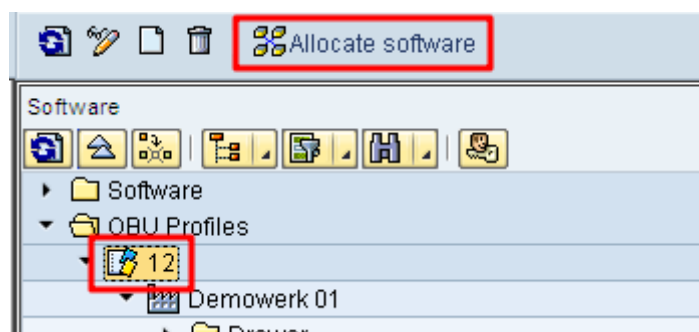


Figure 41: Transmit software to vehicles

A confirmation prompt appears, confirming that the software will be allocated to the selected vehicles and transmitted during the next communication flow between the systems.

3.6.3.6 Screen: tree

The tree is structured as follows:

```
<Software>
  <Software update>
    <Hot fix>
  <OBU-Profiles>
    <Profile>
      <Plant>
        <Vehicle type>
          <Vehicle>
            <System data request>
  <Not allocated>
    <Plant>
      <Vehicle type>
        <Vehicle>
          <System data request>
  <Software update jobs>
```

The visibility of the plant nodes and vehicle type nodes are depending on the configuration. The nodes of System data request and Software update jobs are only visible in expert mode. They were implemented due to compatibility reasons, however, should not be used any longer

Depending on the type of the selected entry, the following functions are provided in the context menu:

<Software>/<Software update>/<Hot fix> level

- *Update/Refresh*
Updates the child nodes
- *Cancel*
Closes the context menu

<OBU-Profile>/<Profile>/<Plant>/<Not allocated> level

- *Update/Refresh*
Updates the child nodes
- *Hide empty folders*
Hides empty folders
- *Cancel*
Closes the context menu

<Vehicle type> level

- *Allocate vehicles*
Allocates the vehicles of the selected vehicle type to an OBU profile
- *Cancel*
Closes the context menu

<Vehicle> level

- *Profile allocation*

- Allocates an OBU profile to a vehicle
- *Cancel*
Closes the context menu

3.6.3.7 Screen: Detailed data

Depending on the selected node different detailed data are displayed on the right side of the screen.

<Software> level

Displays all software versions recorded in the system.

<Software update and Hot fix> level

Displays content (files) of the selected software version.

<OBU-Profile> -level

- *Tab Profile overview*
- *Profiles*
Lists all profiles recorded in the system
- *Vehicles allocated to profile*
Lists all vehicles allocated to the profile selected in the above list.
- *Tab Vehicle overview*
- *Vehicles (total)*
Displays all vehicles allocated to a profile and their respective status.
- *General*
Displays general data of the selected vehicle.
- *OBU*
Displays data of the OBU allocated to the selected vehicle.
- *Software*
Lists the current software version of the OBU allocated to the selected vehicle.
- *Geo-data*
Displays the last known geographical position of the selected vehicle.

<Profile> level

- *Tab Configuration*
Displays configuration settings of the selected vehicle.
- *Tab Software*
Displays the current software version and its content.
- *Tab Vehicles*
Displays all profiles allocated to the selected vehicle.

<Plant> level

- *Plant data*
Displays data of the selected plant.
- *Complete vehicle list per plant*
Displays all vehicles that are allocated to the profile and the plant.

<Vehicle type> level

- *Vehicles (complete)*
Displays all vehicles allocated to the vehicle type and their status.
- *Tab General*
Displays general data of the selected vehicle.

- Tab *OBU*
Displays data of the OBU allocated to the selected vehicle.
- Tab *Software*
Displays an overview of the current software version of the OBU allocated to the selected vehicle.
- Tab *Geo data*
Displays the last known geographical position of the selected vehicle.

<Vehicle> level

- *Vehicle data*
Displays detailed vehicle data.
- *OBU*
Displays detailed data of the OBU allocated to the vehicle.
- *Vehicle status*
Displays the current vehicle status.
- *Currently allocated profile*
Displays the profile that is currently allocated to the vehicle.
- *Software*
Gives an overview of the transmitted software versions.

<System data request> level

The system data request enables you to request selected files from the OBU in order to execute an extended diagnosis. During the course of normal business procedures this function is not required and must not be applied.

The general structure of such a system data request is illustrated in Figure 42. After you have defined the files that shall be read out by the OBU in the SAP® system, the system data request is generated and transmitted during the next communication run. The OBU compiles the files and transmits them to the SAP® system where they are available for further processing.

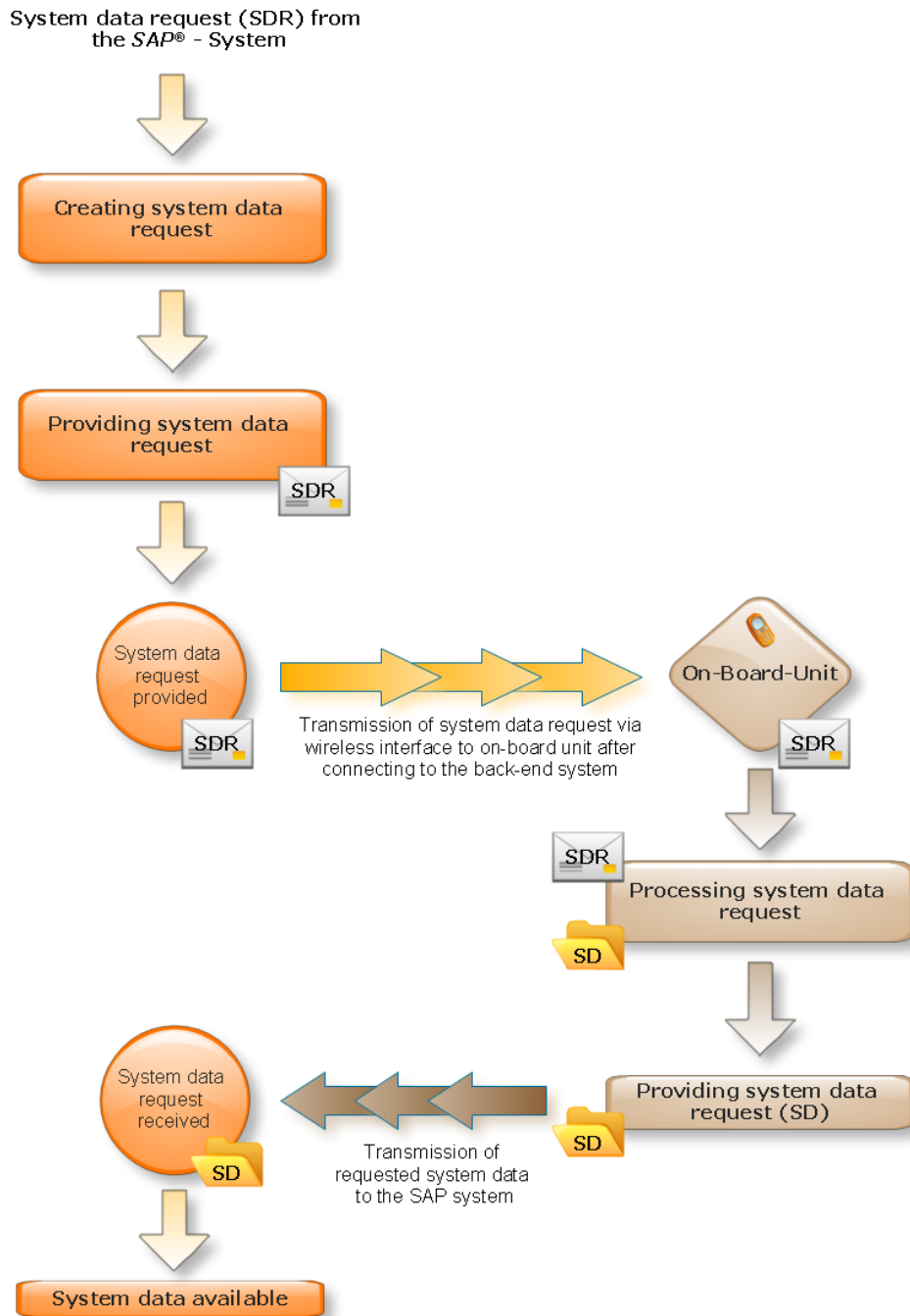


Figure 42: System data request flow

Tab General

Here, you can define which file shall be transmitted. Enter the path and the file name. The check box *Recursive* enables you to request all files of a directory. In order to send the system data request, click on the button *Transmit request (SHIFT+F5)*.

Tab System data

The files received from the OBU are displayed here and can now be saved on a local hard drive.



- Opens a dialog where you can select the location on the local work station where the files shall be saved.

Tab Transmission log

Displays the transmission log of the system data requests

3.6.4 Master data management

Depending on the software version of the OBU, it is required that master data stored in the SAP® system must be accessed. Due to the fact that it is not possible to guarantee a continuous online connection between a vehicle and the SAP® system, it might be necessary to transmit the required master data to the vehicle. However, you have to consider that the performance of the OBUs is limited and therefore only those data should be transmitted that are required for processing the order.



In case that at one point you are not 100% sure how to proceed, it is strongly recommended to contact PROLOGA. Defective master data can jeopardize the functional correctness of your OBU and the vehicle.

Plant list, Vehicle list, Plant data and Vehicle data

Four different types of master data are differentiated:

The *Plant list* contains all plants of a company. It is the first list to be transmitted to the OBU. After the OBU was installed in the vehicle, the technician must select the respective plant from a list.

The *Vehicle list* is only available due to compatibility reasons. This list must not be used any longer.

The *Plant data* contain basic data of a selected plant. The vehicle list is one part of it. After selecting the plant on the OBU, the data are requested. After transmission to the OBU, the technician must select the required vehicle in which the OBU was installed.

The *Vehicle data* display all master data of the selected vehicle. After selecting the correct vehicle on the OBU, these data are transmitted.

3.6.4.1 Screen: Tree

The tree is structured as follows:

<Plant>
 <Vehicle type>
 <Vehicle>
 <Master data>
 <Master data types>

The visibility of plant and vehicle type depends on the configuration.

Depending on the type of the selected entry, the following functions are provided in the context menu:

<Plant> level

- *Update/Refresh*
Updates the child nodes
- *Provide all master data for plant*
Provides master data for all vehicles allocated to this plant. During the next communication cycle the data will be transmitted.
- *Cancel*
Closes the context menu

<Vehicle type> level

- *Provide master data for vehicle type*

Provides the master data for all vehicles of the selected vehicle type. During the next communication cycle the data will be transmitted.

- *Cancel*
Closes the context menu

<Vehicle> level

- *Allocate/Provide master data for vehicle*
Provides the master data to be transmitted into the selected vehicle. During the next communication cycle the data will be transmitted.
- *Cancel*
Closes the context menu

<Master data> level

- *Update/Refresh*
Updates the child nodes

<Master data type> level

- *Provide <master data type> for vehicle*
Provides the master data to be transmitted into the selected vehicle. During the next communication cycle the data will be transmitted.
- *Provide <master data type> for vehicle type*
Provides the master data of this type for all vehicles of the selected vehicle type. During the next communication cycle the data will be transmitted.
- *Provide <master data type> for plant*
Provides the master data of this type for all vehicles allocated to the selected plant. During the next communication cycle the data will be transmitted.
- *Cancel*
Closes the context menu

3.6.4.2 Screen: Detailed data

Depending on the selected node different data are displayed on the right side of the screen.

<Plant> level

- *Plant data*
Displays data of the selected plant.
- *Complete vehicle list per plant*
Displays all vehicles that are allocated to this profile and plant.

<Vehicle type> level

- *Tab Vehicles (total)*
Displays all vehicles allocated to the selected vehicle type and their status.
- *Tab General*
Displays general data of the vehicle selected in the list.
- *Tab OBU*
Displays data of the OBU that is allocated to the vehicle selected in the list.
- *Software*
Gives an overview of the current software version of the OBU allocated to the vehicle selected in the list.
- *Tab Geo data*
Displays the last known geographical position of the vehicle selected in the list.

<Vehicle> level

- *Vehicle data*
Displays detailed vehicle data.
- *OBU*
Displays detailed OBU data allocated to a vehicle.
- *Vehicle status*
Displays the current vehicle status
- *Currently allocated profile*
Displays the profile that the vehicle is currently allocated to
- *Software*
Gives an overview of the transmitted software versions

<Master data> level

- *Field area List*
Gives an overview of the master data types
- *Tab General*
Displays general information of the master data type selected in the list.
- *Tab Data*
Displays the content of the master data type selected in the list
- *Tab Transmission log*
Displays the transmission log of the master data type selected in the list

<Master data type> level

- *Field area List*
Displays all available master data of this type. The column *provided/allocated* defines whether this record shall be transmitted to the vehicle. If the check box is not ticked, the record will not be included. In order to include or delete a record from the master data go to the basic configuration (see also chapter 3.7). The column *available* defines whether a data record has already been sent to a vehicle.
- *Tab General*
Displays general information of the data record selected in the list.
- *Tab Transmission log*
Displays the transmission log of the master data type selected in the list

3.6.5 Menu

Instead of using the function bar, you may call any function via the menu bar. Standard entries defined by the SAP® system will not be considered in the following description.



Figure 43: Menu bar OBU Management

OBU Management → *Activate/Deactivate expert mode*

Activates or deactivates the expert mode. This mode is normally not required and should not be activated.

OBU Management → *Cancel (SHIFT + F3)*

Closes the transaction

Extras → *Generate master data for vehicles*

Opens a dialog to generate master data

Environment → Communication center

Starts the transaction Communication log (see also chapter 3.9). Calling this transaction is only required for an enhanced trouble shooting. It is not used in the normal course of business.

Environment → Configuration

Starts the transaction Basic configuration (see also chapter 3.7). Calling this transaction is only required during implementation of the system or for an enhanced trouble shooting. It is not used in the normal course of business.

3.6.6 Create master data after changes

If master data were changed, they have to be generated (created) again, so that they can be transmitted to the vehicles.

Go to the menu item *Extras → Generate master data for vehicles*.

A dialog opens (Figure 44) where you can define the type of master data to be generated.

Figure 44: Generation of master data

Plant list

If this field is ticked, a new plant list is generated. This is only required if new plants were created or data of plants already existing in the system were changed.

Plant data

If you tick this check box, the plant master data will be newly generated (see also chapter 3.6.4). This is only required if you have created new vehicles or changed the data of vehicles already existing in the system. By selecting the plant, you can define for which plant(s) the data shall be generated.

Vehicle master data

If you tick this check box, the master data of a vehicle or of all vehicles of a plant will be newly generated. This is required if you have created new master data or changed already existing master data. Additionally, you can define to which vehicle(s) or plant(s) the master data shall be generated.



If one or more vehicles are considered, the plant selection will be ignored.

3.7 Basic configuration

(Transaction `/N/WATP/BC_CONFIG` – *Basic configuration*)

In this transaction you can define which master data are to be transmitted to the vehicles and which symbols are to be used to illustrate vehicle status.

The expert mode enables you to change settings of the *SAP® Mobile Order Management by PROLOGA*. However, those changes require a comprehensive understanding of the system's structure and mode of operation and should only be executed after consultation with PROLOGA.

3.7.1 General operation

There are three different types of master data in the system:

- Data types that are delivered with the *SAP® Mobile Order Management by PROLOGA*,
- Data types that are delivered with SAP® or SAP® Waste and Recycling
- Data types that can be defined by the user.

Master data belonging to the group of data types that are delivered with the *SAP® Mobile Order Management by PROLOGA* are named integrated master data and can be maintained in this transaction.

Master data, belonging to the group of data types that are delivered with the SAP® or SAP® Waste and Recycling system, are to be maintained in the respective SAP® transactions.

Master data that can be defined by the user within the *SAP® Mobile Order Management by PROLOGA* are named additional master data and can be maintained in this transaction.

You may define for which vehicle each master data record shall be provided for transmission. Only those records that are allocated to a vehicle will be transmitted. For example, you may thereby control that only those measuring units required for the daily work are available for selection in a vehicle.

By default each newly created master data record is allocated to all vehicles. This setting can be avoided on global level with changes in the node *Master data to be allocated*. In order to adjust the allocation of master data for single vehicle types (per plant), go to the respective node *Master data to be provided (plant related)* and activate or deactivate the respective data record.



If you have changed a vehicle type specific setting this setting will be used as standard setting in the future, i.e. the plant independent settings will not be considered any longer.

In order to change vehicle master data proceed as follows:

- Create/change a master data record
- Allocate/provide the master data record
- Generate new master data

In order to maintain master data start the transaction `/N/WATP/BC_CONFIG` and select the tree view *Master data*.



Selection of tree view

Creating a data record

Select the required master data type in the tree. The associated master data are displayed on the right side of the screen. Create a new data record by clicking on the *Create/New* button (*F7*) or delete a data record by clicking on the *Delete* button (*SHIFT+F2*). If you want to edit a data record click on the *View <-> Edit* button (*F5*). Enter the required data and save the record.

Providing/Allocating a data record

Go to the node *Master data to be provided* and select a master data type. Check if the check box in front of the master data record (listed on right side) is ticked. Repeat the foregoing under the node *Master data to be provided (plant related)* for the vehicle type.

Generation of new master data

After changing the settings, go to *Create master data after changes* (see chapter 3.6.6) and generate the master data as described.

After starting the transaction, a dialog opens. Select the working environment. The working environment defines which vehicles or plants you are allowed to change.

Short text	Selection name	Description
	Alle Werke	
	BC_Werke	

Figure 45: Dialog - Administration

After confirming your selection (green check mark), the main screen opens. Then select the category (general or master data).

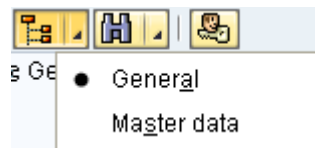


Figure 46: Selecting category

The screen is divided in two areas which will be explained in the following chapters.

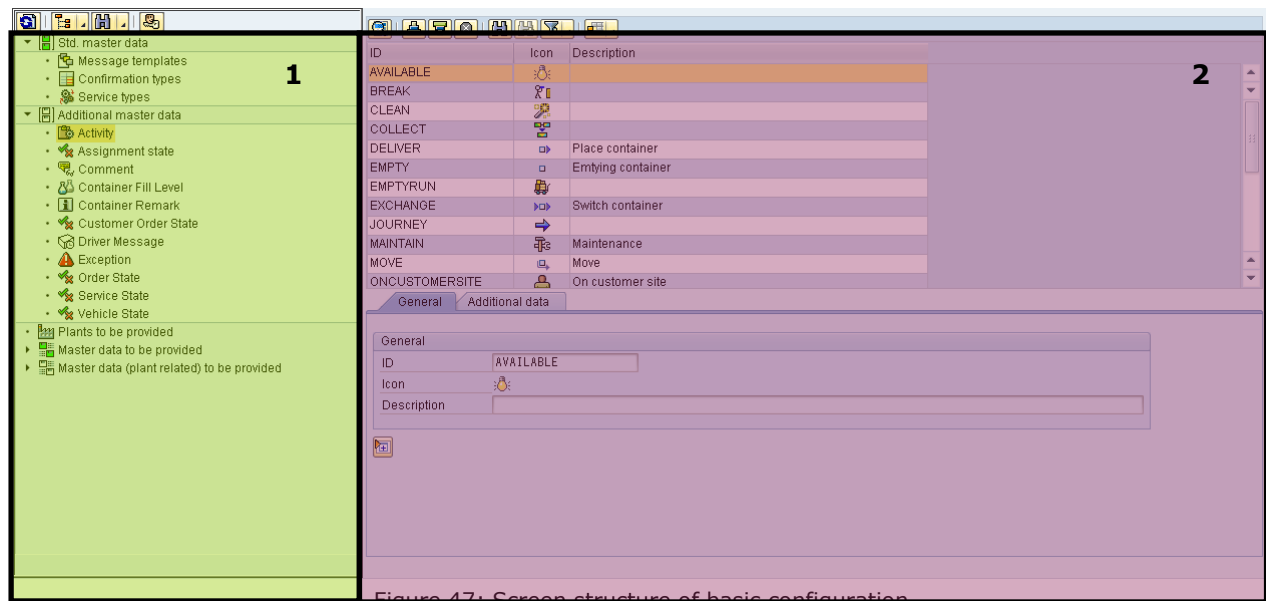


Figure 47: Screen structure of basic configuration

1. tree (nodes)
2. detailed information of a selected node

3.7.2 General

Here you can adjust the symbols that illustrate the vehicle status in the tree.

3.7.2.1 Screen: Tree

The tree structure is as follows:

<General>

If the tree displays additional nodes you are in expert mode. In this case switch back to standard view.



Switches between standard view and expert view

The following context menu is provided for all nodes:

Select

Selects the current node

Back

Same as the *back* button (*F3*) in the menu bar

Cancel

Same as the *cancel* button (*F12*) in the menu bar

Close

Same as the *close* button (*SHIFT+F3*) in the menu bar

Activate/deactivate expert mode

Activates or deactivates the expert mode

3.7.2.2 Screen: Detailed data

Status

In this area you can define the symbols that are to be allocated to single vehicle statuses. Additionally, you can define the time period (validity of vehicle position) after which the symbol changes to the symbol for unknown position (if there is no further communication with the vehicle).

Hierarchy

Using the two check boxes you can define whether the plants and vehicle categories shall be displayed in the tree.



Change these settings only after consultation with PROLOGA.

3.7.3 Master data

Here you can maintain your master data and define which master data shall be transmitted to a vehicle.

3.7.3.1 Screen: Tree

The tree is structured as follows:

- <Master data>
- <Message templates>
- <Service types>
- <Confirmation types>
- <Additional master data>
- <Company specific master data>
- <Plants to be provided>
- <Master data to be provided>
- <Master data types>
- <Master data to be provided (plant related)>
- <Plant>
- <Vehicle category>
- <Master data type>

The visibility of plant and vehicle type is depending on the configuration

The following context menu is provided for all nodes:

- *Select*
Selects the current node
- *Back*
Same as the *back* button (*F3*) in the menu bar
- *Cancel*
Same as the *cancel* button (*F12*) in the menu bar
- *Close*
Same as the *close* button (*SHIFT+F3*) in the menu bar
- *Activate/deactivate expert mode*
Activates or deactivates the expert mode

3.7.3.2 Screen: Detailed information

<Message templates>-level

Here you can define message templates which can be used by the dispatcher when sending messages to a driver.

<Service types> level

The service types defined in the SAP® system are displayed on this level. You can maintain the data in the IMG.

<Confirmation types> level

On this level you can define the confirmation fields that are available on the OBU. Furthermore, you can define whether these are mandatory fields to be filled in by the driver.

<Company specific master data types> level

Here you can maintain company specific master data.

<Plants to be provided> level

If you put a new vehicle into operation you have to select the plant to which the vehicle shall be allocated first during installation. In this area you can define those plants that shall be available for selection. If you have made changes, you have to generate the plant list anew. (See also chapter 3.6.6)

<Master data types> level

Here you can define which master data shall be available in the vehicles. Select the respective data in the list and click on one of the following buttons:



Switches between the provision statuses of the selected list entries



Changes status of all list entries to *not ready*



Changes status of all list entries to *ready*



Vehicle specific settings overrule the global settings. Therefore, check the settings of each single plant and vehicle category.

If you have made changes, you have to generate the vehicle data anew. (See also chapter 3.6.6).

3.7.4 Menu bar

Instead of using the function bar, you may call any function via the menu bar. Standard entries defined by the SAP® system will not be considered in the following description.



Figure 48: Menu bar basic configuration

Configuration → *Select range*

Opens initial dialog

Configuration → *Activate/deactivate expert mode (CTRL + SHIFT + F8)*

Activates or deactivates the expert mode

Configuration → *Cancel (SHIFT + F3)*

Closes transaction

Extras → *Generate master data for vehicle*

Generates master data for vehicle anew and provides them for transmission

Environment → Communication center

Starts transaction Communication log. (See also chapter 3.9). Calling this transaction is only required for an enhanced trouble shooting. It is not used in the normal course of business.

Environment → Configuration

Starts transaction Basic configuration (see also chapter 3.7). Calling this transaction is only required during implementation of the system or for an enhanced trouble shooting. It is not used in the normal course of business.

3.8 Administration

(Transaction /N/WATP/BC_ADMIN - Administration)

This transaction allows for the monitoring of the data connection between the SAP® system and the OBU. The number of vehicles equipped with OBUs is displayed as well as their online status. Furthermore, an overview of all data packages to be exchanged and errors occurred is given. If a system malfunction is assumed or data are missed this transaction should be consulted first to start trouble shooting.

3.8.1 General operation

The transaction provides two different views. While the standard view provides you with all important information, additional data for trouble shooting are displayed in the expert view. It is strongly recommended to use only the standard view in the normal course of business.



Switches between standard view and expert view

The following mask (in expert mode) opens after starting the transaction:

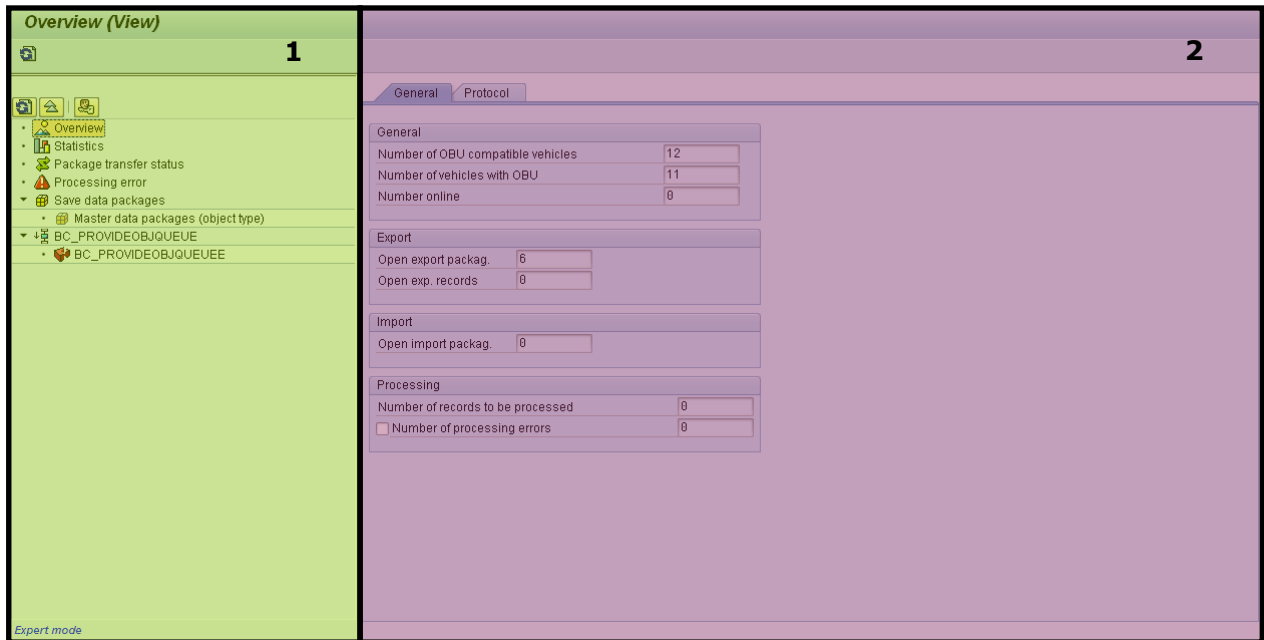


Figure 49: General structure of administration – expert view

1. Tree (with nodes)
2. Detailed information to the selected node

3.8.2 Screen: tree

The tree allows for several data views which you may select via the nodes. The following structure is provided:

<Overview>
<Object type data blobs>
<Data blob history>
<Package transmission status>
<Processing error>

The Nodes for object data blob, data blob history, package transmission status and processing error are available in expert mode only.

For further information on the provided detailed data see also the following chapter.

The following context menu is provided for all nodes:

- *Select*
Selects the current node
- *Back*
Same as back *button* (*F3*) in the menu bar
- *Cancel*
Same as the *cancel* button (*F12*) in the menu bar
- *Close*
Same as close *button* (*SHIFT+F3*) in the menu bar
- *Clear*
Starts data cleansing, i.e. data consistency is checked and data are updated, e.g. online status of vehicles is checked and – if required - updated.

3.8.3 Screen: Detailed information

<Overview> level

- *Tab General*
General data regarding the vehicle status and the current communication status are displayed.
- *Number of vehicles:*
Number of vehicles that are registered as active in the system (with installed OBU)
- *Number online:*
Number of vehicles with status *Online* (ignition on, vehicle available)
- *Open export packages:*
Number of data packages that are ready for transmission to vehicles.
- *Open export records:*
Number of data records that are ready for transmission to vehicles. Several data records for one vehicle are combined to one export package.
- *Open import packages:*
Number of data packages that were received from vehicles but have not been processed in the SAP® system yet.
- *Number of data records to be processed:* Number of data records that were received from vehicles but have not been processed in the SAP® system yet.
- *Number of processing errors:*
Number of data records that produced errors when processing. As the calculation of this value requires a lot of resources you have to activate it manually (by ticking the check box).
- *Tab Protocol*
Here you may view logs of different areas (child objects) of the *SAP® Mobile Order Management by PROLOGA*. Besides, you may restrict the data to be displayed by selecting a logging date. An external identification (e.g. equipment number) may be used as filter, as well.

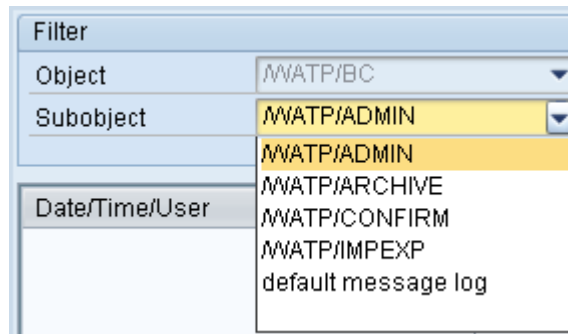


Figure 50: Short list of sub-objects

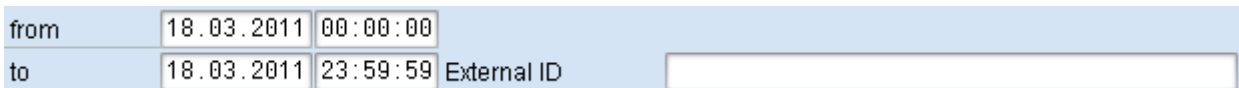


Figure 51: Date and time restrictions as well as entry of an external identification

The logging of errors and warnings is illustrated with yellow and red symbols. A green symbol is allocated to non-critical messages.

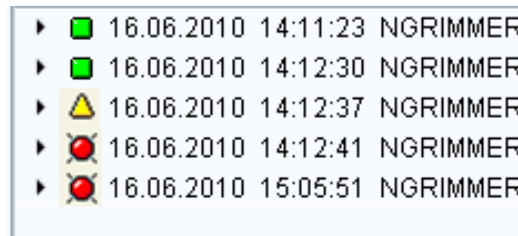


Figure 52: Displaying critical (red), non-critical (green) or important notes (yellow)

For each protocol entry additional detailed information may be displayed (Figure 53). These detailed data are integrated in the system. They can be customized by a PROLOGA employee.

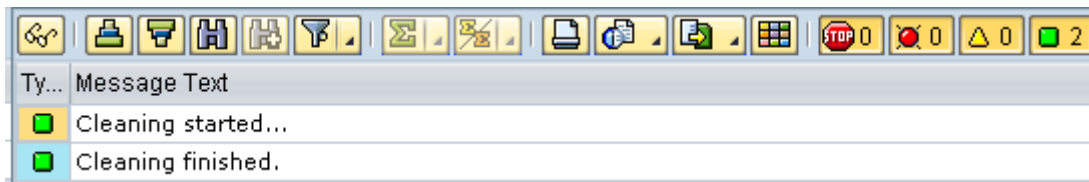


Figure 53: Detailed data of a log

<Object type data blobs> level

Object data blobs are data packages that may be generated either per vehicle or *per plant/vehicle category*. In this area, the data packages of a certain type generated last are displayed.

You may select from the following object types:

- *Master data per vehicle (Obsolete)*
Displays object data packages that were generated in mode *per vehicle*
- *Vehicle list (Obsolete)*
Displays all generated *vehicle list packages*
- *Plant list*
Displays all generated *plant list packages*
- *Master data per plant*
Displays all master data packages allocated to a plant
- *Master data per plant/vehicle category*

Displays all generated object type data packages allocated to a vehicle category of a certain plant

- *Filter SubID*

The SubID may be compared to a key which consists of several data. In order to filter such a key you have to enter parts of the key name in the respective field. If you leave the field blank, all entries will be displayed. The star (*) serves as wildcard character. The *Range* button (red in Figure 54) enables you to enter different value ranges in a separate dialog, e.g. all SubIDs from 1 to 1000.

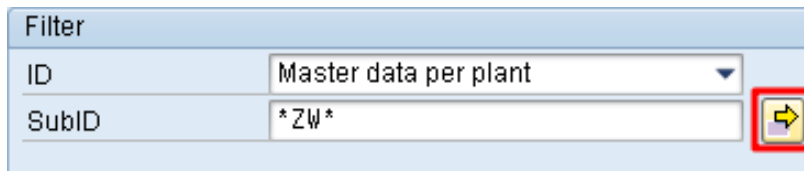


Figure 54: Filter object type data package

After entering the selection criteria, confirm your entries with the *ENTER* button. Thereafter the list will be updated and the allocated entries displayed.

Below the list the two tabs *General* and *Data* are displayed. The first tab displays the entry selected in the list. The second tab displays the master data package (usually in XML⁶ format) (see also Figure 55).

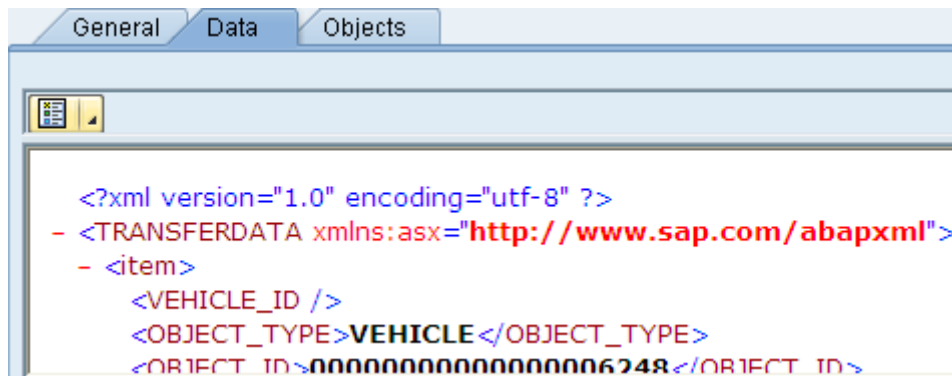


Figure 55: Displaying object type data package

<Data blob history> level

The history of all generated data blobs (data packages) is displayed. For further information (system structure and operation) see also chapter 0.

<Package transmission status> level

The package transmission status lists all sent and received data packages.

You may identify those data packages of the transmission type *Export* that were transmitted to a vehicle in the column *Transmit*.

It is rarely required to delete all provided data packages of a vehicle. This might be the case if a vehicle after a longer break is online again and the provided routes and master data shall not be transmitted to the vehicle. Select the respective data record in the list and click on the button *Transmit status*.



The improper execution of this function might result in loss of data or other serious problems and should only be applied after consulting PROLOGA.

3.8.4 Menu bar

Instead of using the function bar, you may call any function via the menu bar. Standard entries defined by the SAP® system will not be considered in the following description.



Figure 56: Menu bar administration

Administration → Activate/Deactivate expert mode (CTRL + SHIFT + F8)

Activates or deactivates the expert mode

Administration → Cancel (SHIFT + F3)

Closes the transaction

Extras → Clear

Starts data cleansing, i.e. all data are checked regarding their consistency and are updated. For example, the online status of all vehicles is checked and – if required – updated.

3.9 Communication log

(Transaction /N/WATP/BC_CC – Communication log)

This transaction provides information on all data packages that were exchanged between the SAP® system and the OBUs. This transaction may be used for an enhanced trouble shooting.

3.9.1 General operation

The communication log creates entries for each data exchange between the SAP® system and the OBUs or if data are provided to be transmitted. These entries may be analyzed in this transaction. In order to track a specific data exchange (e.g. for trouble shooting), select the period at first and then choose the required object and transmission types. The tree provides you with information on the status of a single object (illustrated by symbols) and gives additional information on the detail screen.

After starting the transaction, select the period as well as the object and transmission types to be displayed. According to your entries the pre-filtered data will be displayed in tree structure. It is recommended to exclude position messages. If you do not make any restrictions, all records will be displayed.

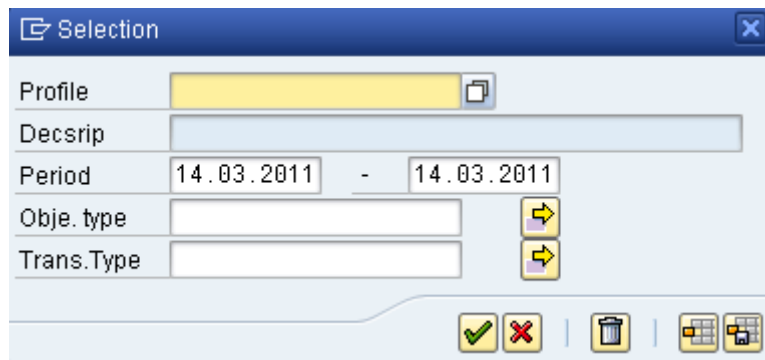


Figure 57: Dialog Communication log

After confirming your entries (green check mark), the main screen opens (Figure 58) which is divided in two areas:

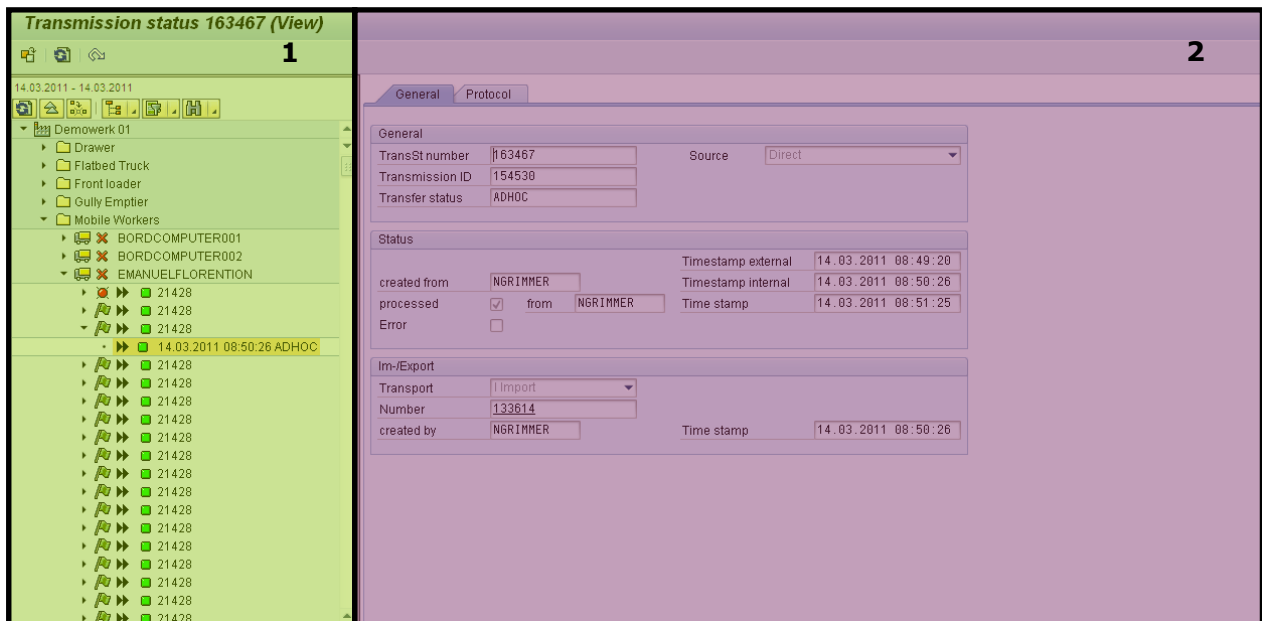


Figure 58: Screen structure of container tracking

1. Tree listing container movements
2. Detailed data of the selected node

3.9.2 Screen: tree

Two different tree views are provided (see also chapter 3.9.2.1 and 3.9.2.2) which you may select via the function button above the tree (see also chapter 3.1.1).



- Switches between the different tree views

The meaning of the symbols used in the tree is explained in chapter 5.

3.9.2.1 Tree view Communication

All communication transactions in the selected period are displayed. The tree is structured as follows:

- <Plant>
- <Vehicle type>
- <Vehicle>
- <Transmission header>
- <Transmission status>

The visibility of plant and vehicle type depends on the configuration.

Depending on the type of the selected entry the following functions are provided in the context menu:

- <Plant>/<Vehicle type> level
 - *Update/Refresh*
Updates the tree structure
 - *Cancel*
Closes the context menu

<Vehicle> level

- *Update/Refresh*
Updates the child nodes

Provides the possibility to transmit all or parts of the master data to the selected vehicle



This function is obsolete and should not be used any longer.

- *Cancel*
Closes the context menu

<Transmission header> level

- *Update/Refresh*
Updates the tree structure
- *Cancel*
Closes the context menu

<Transmission status> level

- *Status Delivered*
The status of the data object is changed to *DELIVERED* in the SAP® system.



The improper execution of this function may result in loss of data and should only be applied after consulting PROLOGA.

- *Block for transmission*
The data object is marked as blocked for transmission and will not be transmitted to the OBU.



The improper execution of this function might result in loss of data and should only be applied after consulting PROLOGA.

- *Cancel*
Closes the context menu

3.9.2.2 Tree view Data stock

All objects of an object type that have ever been transmitted to an OBU are displayed. The tree structure is as follows:

<Plant>

<Vehicle type>

<Vehicle>

<Object type>

<Object>

The visibility of plant and vehicle type depends on the configuration.

Depending on the type of the selected entry, the following functions are provided in the context menu:

<Plant>/<Vehicle type> level

- *Update/Refresh*
Updates the child nodes
- *Cancel*
Closes the context menu

<Vehicle> level

- *Update/Refresh*
Updates the child nodes
- *Transmit*
Provides the possibility to transmit all or parts of the master data to the selected vehicle. NOTE: This function is obsolete and should not be used any longer.
- *Cancel*
Closes the context menu

<Object type> level

- *Next*
Standard function in SAP® menu
- *Back*
Standard function in SAP® menu
- *Cancel*
Standard function in SAP® menu
- *Close*
Standard function in SAP® menu
- *Select different period*
Opens dialog to select a different period
- *Execute processing*
Starts internal data processing



This function is obsolete and should not be used any longer.

<Single object> level

- *Delete from vehicle*
Deletes the selected object from vehicle
- *Re-transmit to vehicle*
Transmits the selected record again to the vehicle
- *Cancel*
Closes the context menu

3.9.3 Screen: Detailed data

<Vehicle> level (if tree view communication is selected)

- *Tab General*
Displays general vehicle data

- *Tab Statistics*
Displays statistics of data to be processed. In order to update the statistics tick the respective check box on tab *GENERAL*.

<Vehicle> level (if tree view data stock is selected)

- *List*
List of all data objects that are allocated to a vehicle

<Transmission header> level

- *Tab General*
Displays general data of the selected transfer object
- *Tab Parameter*
Displays transmission parameters of the transfer object. The parameters will be deleted 24 hours after successful processing due to performance reasons.
- *Tab Log*
Displays additional processing data

<Transmission status> level

- *Tab General*
Displays general information of the selected transmission status
- *Tab Log/Protocol*
Displays additional processing data

3.9.4 Menu bar

Instead of using the function bar, you may call any function via the menu bar. Standard entries defined by the SAP® system will not be considered in the following description.



Figure 59: Menu bar communication log

Communication → *Select different period (SHIFT + F5)*

Opens initial dialog to select another period for which data shall be displayed

Extras → *Execute processing*

Starts the internal data processing. NOTE: This function is obsolete and should not be used any more.

Extras → *Statistics (CTRL + SHIFT + F4)*

Opens a statistics dialog for all vehicles (Figure 60)

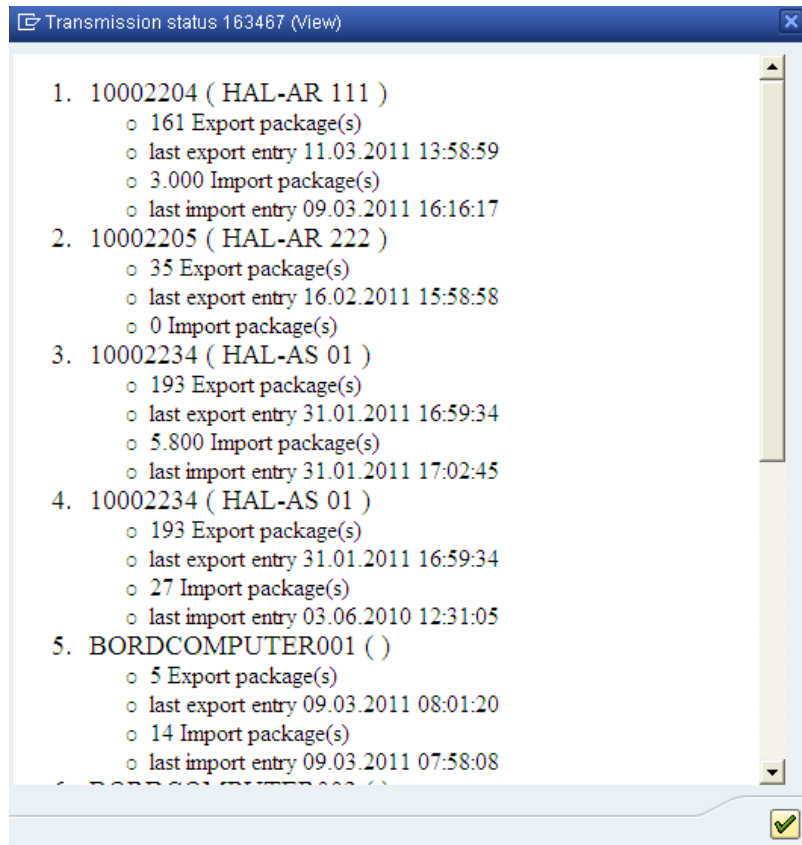


Figure 60: Statistics - Dialog of OBU communication

4 Integration into Multi Item Weighing

SAP® Mobile Order Management by PROLOGA enables the display of the actually active waste disposal order item of the on-board computer within the search help of the weighing transaction.

If the user enters the license plate referring to the equipment and exist just one active waste disposal order item for the key date then the system transfers the waste disposal order item into the weighing transaction automatically.

Furthermore it's possible to transfer additional data into the weighing transaction of the waste disposal order item.

Example:

After transferring the route to the on-board computer the driver starts to process the waste disposal order items. If the first waste disposal order item is activated by the driver the status will be transferred to the backend-system immediately. Within the operational planning the related waste disposal order item gets the status.

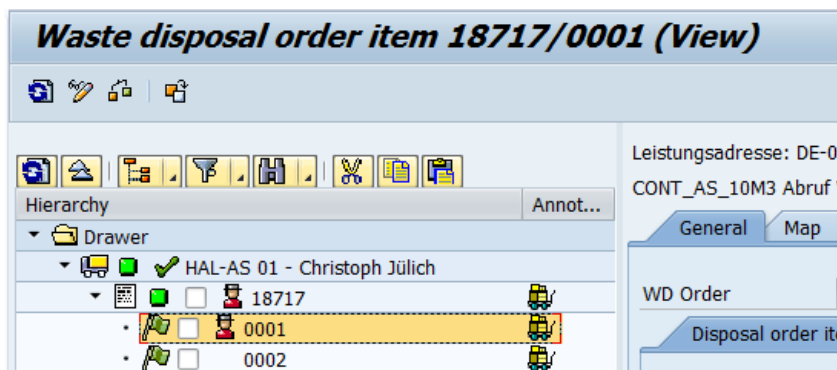


Figure 61: Active waste disposal order item in operational planning

Within the multi item weighing (transaction *EWAWA_MULTI*) the active waste disposal order item will be transferred automatically in the weighing item entering the license plate.

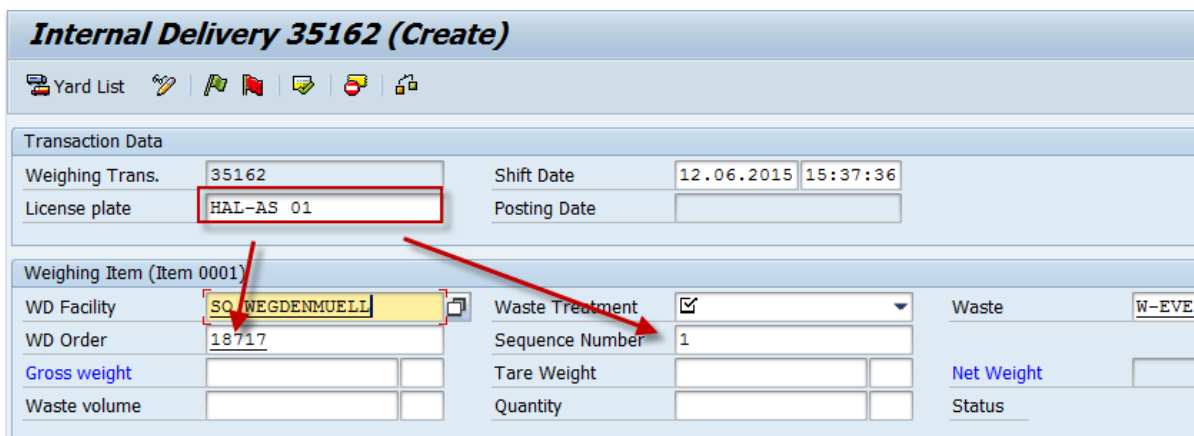


Figure 62: Transferring active WDO item in multi item weighing

Within the search help for waste disposal order items in the multi item weighing the status will be displayed in addition.

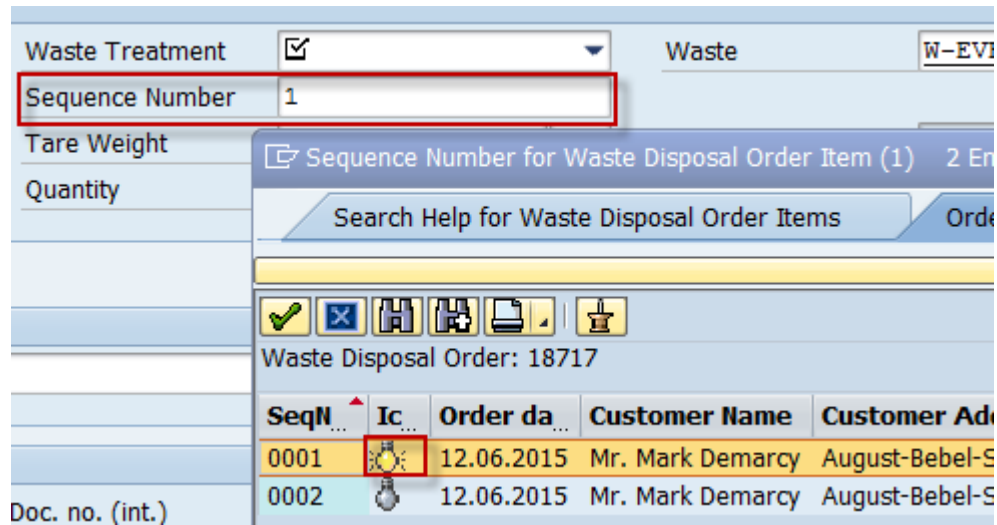


Figure 63: Display status of WDO item within the search help of the multi item weighing

Further information regarding configuration and field value transfer will be provided in following document: *SAP_Mobile_Order_Management_by_PROLOGA_Configuration_Guide*

5 Symbols

5.1 Symbols (examples) of the order management

Node	1.Symbol	Explanation	2.Symbol	Explanation
Order		Order		Order started
				Confirmation data for order received
				Order continued
				Order finished
				Order on hold
				Order finished incomplete
				Order sent back by driver or on request
				Order cancelled
				Order transmission aborted
				Order automatically closed
Order item		Order item		Order item started
				Confirmation data for order item received
				Order item continued
				Order item finished
				Order item on hold
				Order item finished incomplete
				Order item sent back by driver or on request
				Order item completed without performance report
				Order item transmission aborted

Table 1: Symbols (examples) for the order management

5.2 Symbols (examples) for communication state




Node	Symbol	Explanation
Vehicle, Order, Order item		Object ready for transmission
		Object transmitted
		Object was rejected by OBC (mostly when master data are missing or order/order item is already closed)

Table 2: Symbols (examples) for communication state

5.3 Tree symbols of performance data confirmation




Symbol	Explanation
	No conflicts in object and child objects
	No conflict in object, but one of the child objects has conflict
	Conflict in object

Table 3: Tree symbols of performance data confirmation

5.4 Buttons of performance data confirmation










Symbol in function bar	Explanation
 Checked	Set to status <i>CHECKED</i> : If a correction  ord for the selected main object exists, its status will be changed to <i>CHECKED</i> otherwise the status of the confirmation record is changed to <i>CHECKED</i> "
 Correction record	Create <i>Correction record</i> : Only available if the current object is in status <i>DISPUTED</i> and there is no correction record available so far. Applying this function creates a correction record. The data of the selected confirmation record are copied as default values.
	<i>Copy selected confirmation data</i> : The selected confirmation data are copied to the correction record and saved (provided that you are not in edit mode). If you are in edit mode, confirmation data are only copied but not saved.
	<i>Copy fuelling data</i> : Copies the fuelling data of the confirmation record into the correction record.
	<i>Delete fuelling</i> : Deletes the fuelling data in the correction record.
	<i>Confirm route</i> : Confirms the route with the relevant correction data.
	<i>Copy signature</i> : Signature of the selected record is copied to the correction record.
	<i>Delete signature</i> : Deletes signature from the correction record.

Table 4: Buttons of performance data confirmation

5.5 Symbols (examples) of container tracking

Node	Symbol	Explanation
Container type		Container type






Node	Symbol	Explanation
Container		Container
Movement		Place container
		Empty container
		Pick up container
		Exchange container

Table 5: Symbols (examples) of container tracking

5.6 Symbols (examples) of vehicles status




Node	1. Symbol	Explanation
Vehicle		OBU allocated to vehicle
		Vehicle is OBU compatible; OBU not allocated
		Vehicle is not OBU compatible

Table 6: Symbols (examples) of vehicles status I







Node	2. Symbol	Explanation
Vehicle		OBU is switched off
		OBU is switched on
		OBU is switched on and position is valid
		OBU is switched on but position is invalid
		OBU state is unknown
		OBU is blocked for communication

Table 7: Symbols (examples) of vehicles status II