



Usage Questionnaire

Template for manual completion

Contents

Introduction	3
Questionnaire	4
Your Results	19
Next Steps	20
Calculation Method	21
Annual Pricing	22

Introduction

This document has been designed to provide a basis upon which a current or prospective QuantityWare BCP (Bulk Calculations - Petroleum) or BCG (Bulk Calculations & Gas) customer can empirically gauge their usage according to the pricing matrix publically released in June 2011 for the QuantityWare solution.

In November 2019, an interactive Usage Questionnaire functionality was launched, requiring questionnaires to be completed and submitted to QuantityWare via the an interactive form on the QuantityWare Service Portal:

<https://service.quantityware.com/usagequestionnaire>

From November 2019, the purpose of this document is simply to allow the offline review and analysis of the questions asked in order to prepare for the completion of the online form.

Questionnaire

BCS Products

Determining the BCS Product(s) Required

QuantityWare BCS provides bulk quantity conversion and compliance / transparency functionality for both Petroleum and Gas products.

Petroleum (BCP)*

QuantityWare BCS supports the following products:

- Crude Petroleum Products
- LPG/NGL
- Petrochemicals
- Bulk Chemicals
- Biofuel

If you require quantity conversions, or need to analyze your existing conversions, for any of the above petroleum products, you will require a **BCP** usage agreement.

Gas (BCG)*

QuantityWare BCS supports the following products:

- Natural Gas
- Bio Gas
- LNG
- NGL/LPG
- 100% Hydrogen Gas / Hydrogen Gas Mixtures > 5%

If you require quantity conversions, or need to analyze your existing conversions, for any of the above gas products, you will require a **BCG** usage agreement.

* Read the [Supported Products FAQ](#) for support of specific products.

Question: BCS Products

Which BCS Product are you completing this questionnaire for?

- Bulk Calculations - Petroleum (BCP)
- Bulk Calculations - Gas (BCG)

Scale

Determining Your Organization Scale

QuantityWare defines three organization scales, which are differentiated based on location, trade breadth and complexity regulatory work:

National

- Main presence in one country, majority local trade
- Simple GRC and transparency complexity, primary responsibility to a single regulatory body, local legal implications

Continental

- Presence in two or more countries, majority continental trade
- Advanced GRC and transparency complexity, responsibility to limited number of regulatory bodies, national legal implications

Global

- Extended presences on more than one continent OR extensive global trade
- Maximum GRC and transparency complexity, responsibility to many regulatory bodies, international legal implications

The following questions will help determine which scale your organization belongs to.

Question: Scale - Operational Locations

In how many countries does your organization trade (Include international organizational reporting)?

BCP (Petroleum)

- 1 (10 points)
- 2-5 (20 points)
- 6+ (within one geo. continent*) (20 points)
- 6+ (30 points)

BCG (Gas)

- 1 (10 points)
- 2-5 (20 points)
- 6+ (within one geo. continent*) (20 points)
- 6+ (30 points)

*Geographical Continents are: Africa, America North, America South, Antarctica, Asia, Australia & Oceania, Europe.

Question: Scale - International Trade

What percentage of your trade in bulk goods processed within the SAP Oil, Gas, and Energy system is related to locations outside of your “country of registration”?

BCP (Petroleum)

- 0-20% (10 points)
- 21-50% (20 points)
- 51%+ (30 points)

BCG (Gas)

- 0-20% (10 points)
- 21-50% (20 points)
- 51%+ (30 points)

Usage

Determining Your Organization Usage Profile

QuantityWare defines three key usage profiles, based on a number of factors around the configuration of your organization's Oil / Gas deployments:

Classes	Value Factor		
	Simple	Standard	Complex
Measurement standards leveraged:	One or two complex standards	Multiple complex standards	Full range of standards
Maintained standard solution simplifies:	Standard, non-customer specific calculations	Limited customer calculations, specific rules	Multiple customer calculations, extensive specific rules
Exposure to changes in calculations standards	Possible	Limited	High
"Standard Configuration Template" transparency, simplification & streamlining benefits:	Mainly single business unit, projects, a product group	Limited parallel business units, projects, product groups	Multiple, parallel business units, projects, product groups
SAP infrastructure landscape simplified & streamlined via "SAP Certified Integration" delivery	Single SAP system landscape	Multiple SAP system landscapes	Extensive, multi-platform, global system landscapes
External Interface usage - provision of QuantityWare functions to SAP-external systems:	SAP-system internal usage	Limited possibilities	Extensive usage and possibilities
Petroleum measurement specialist support and efficiency optimization:	Single expert / business validation of external calculations	Small staff, extensive workload / complexity, limited business requests	Extensive staff workload / complexity / business requests

The following questions will help determine which usage profile your organization has.

Question: Usage – Measurement Standards Leveraged

How diverse are your current and future needs for conversions standards?

You should only have to pay for what you use, however as the area of quantity conversions within energy organizations is a technically complex topic, and has been less than transparent for the business areas over the past years, many organizations are not sure what their current usage is.

An investigation of this area can define levels of compliance with contractual and legal requirements and may even lead to benefits by using more modern and accurate conversions standards ?

e.g. in the case of LPG & NGL as shown in the QuantityWare working paper. Thus, this point refers to the conversion standards that will be utilized by your organization when using the QuantityWare solution. A list of the standards divided into two groups can be found in the following product-specific documents:

- [BCP Supported Standards](#)
- [BCG Supported Standards](#)

Using QuantityWare BCP and BCG, you will be able to print lists of all delivered measurement standard implementations and compare your existing measurement standard implementations with the validated BCP and BCG implementations.

In addition, the online documentation can be leveraged for your existing implementations, making these transparent to business users and compliance authorities. Hint: The minimum necessary number of component standards is 4 (resulting in a single "complex standard") for BCP customers, i.e.:

- 1x Bulk quantity calculation Model
- 1x Temperature & Pressure correction Standard
- 1x Density/Weight/Volume intra-conversion standard (i.e. Mass & Weight)
- 1x Unit of Measure conversion standard

For details, see the appropriate “Supported Standards Manuals” (links above).

How many component standards does / will your organization utilize?

BCP (Petroleum)

- 4-5 (10 points)
- 6-10 (20 points)
- 11+ (40 points)

BCG (Gas)

- 4-5 (10 points)
- 6-10 (20 points)
- 11+ (40 points)

Question: Usage – Maintained Standard Solution Simplifies

The development and maintenance of customer-specific solutions can be expensive, time-consuming and generate considerable risk.

Sourcing a "best of breed", "standard solution", from a single, experienced supplier, who listens to all voices within the market, reacting proactively to a changing environment, with a global customer base and a credo of quality, provides security and continuity in a business-critical area.

A list of the standards for BCP and BCG can be found in the following product-specific documents:

- [BCP Supported Standards](#)
- [BCG Supported Standards](#)

How many calculations "standards" (based upon the categories as defined in the above documents) has your organization implemented via in-house development or configuration, that would be replaced by the QuantityWare solution? (i.e. currently used "C" routines or derivatives will be replaced by the QuantityWare BCS solution in addition to further standards being used)

BCP (Petroleum)

- 0-1 (0 points)
- 2-3 (10 points)
- 4+ (20 points)

BCG (Gas)

- 0-1 (0 points)
- 2-3 (10 points)
- 4+ (20 points)

Question: Usage - Exposure to Changes in Calculation Standards

Management of change risk can provide an organization with major benefits.

With a full range of bulk measurements standards, compliance and transparency tools available, organizations can plan and develop business strategies in a proactive manner, rather than being forced to react to changes forced upon them by external organizations.

External organizations (either regulatory organizations or business partners within your field of business operations) can potentially influence your organizations' "choice of calculations standards for bulk movements" (via contract, legal or recommendations).

How many external organizations would be able to influence your organizations' choice of calculations standards for bulk movements?

BCP (Petroleum)

- 1-2 (10 points)
- 3-5 (20 points)
- 6+ (40 points)

BCG (Gas)

- 1-2 (10 points)
- 3-5 (20 points)
- 6+ (40 points)

Question: Usage – Business Unit Count

One of the ways in which QuantityWare provides ROI is through the simplification and streamlining of project work and on-going production support in the area of material bulk calculations, allowing work to be performed quicker and more thoroughly by professionals whose knowledge and experience is strengthened by leveraging the QuantityWare solution.

The solution encompasses a vast configuration and customizing template as well as measurement cockpit capabilities which provide transparency and compliance (from documentation to automated test execution) for your complex configurations. Through the provision of useful project and test tools, higher levels of quality and transparency are achieved, thus value is generated depending on the project extent in organizational and business terms.

How many Business Units relying on the valuation of bulk product will be using the productive SAP Oil, Gas, and Energy system?

BCP (Petroleum)

- Exploration & Production (10 points)
- Bulk Transport – Pipelines & Marine (10 points)
- Refining (15 points)
- Petrochemical processing (10 points)
- Secondary Distribution (5 points)
- Industrial / Private Retail (5 points)
- Biofuel processing (5 points)

BCG (Gas)

- Exploration & Production (10 points)
- Transmission – Pipeline (10 points)
- LNG Shipment – Marine (10 points)
- Processing (10 points)
- Industrial / Utility Retail (10 points)
- Biogas processing (10 points)

Question: Usage - Product Groups Count

The effect is also dependent upon the number of **Product Groups** which can be processed by the SAP Oil, Gas, and Energy solution, using extended QuantityWare calculations possibilities.

How many Product Groups will be processed by the SAP Oil, Gas, and Energy solution?

BCP (Petroleum)

- Crude Petroleum Products (10 points)
- LPG/ NGL (10 points)
- Petrochemicals and Bulk Chemicals (10 points)
- Bulk Chemicals (10 points)
- Biofuel (10 points)

BCG (Gas)

- Natural Gas (20 points)
- Bio Gas (20 points)
- LNG (20 points)
- NGL/LPG (10 points)
- Condensate * (0 points)
- 100% Hydrogen Gas / Hydrogen Gas Mixtures > 5% / Other Industrial Gases ** (0 points)

* We provide a special, discounted BCP Condensate supplement for BCG. This allows our customers to perform productive condensate calculations, and validate legacy calculations, without requiring the full BCP product, as condensate calculations require the use of a petroleum quantity conversion standard. ** BCG support for 100% Hydrogen Gas / Hydrogen Gas Mixtures greater than 5% / other industrial gases requires the use of our Hydrogen & Industrial Gases supplement. Please [read our FAQ](#) for more details.

Question: Usage – SAP Projects Multiplier

The number of independent **SAP Projects** in which the solution is used also defines a value multiplier, i.e. in which the bulk materials processed have to be defined.

E.g. a customer is trying to leverage a “central architecture” with a single system landscape (DEV / TST / CON / PRD) containing the “business units” upstream, downstream and petrochemicals.

All “business units” use the same system, but in this case, each business unit has its own project and project team, i.e. one project is forming the upstream functionality, the next downstream and the next petrochemicals.

All have to perform similar configuration tasks in the system for their products. Therefore, each project gains value by using our measurement cockpit control and analytic tools and extensive customizing / configuration template. i.e. this example yields value 3, equals 20 points.

Taking this example and extending it - if however there was an additional “core functionality” project, which was responsible for providing central customizing and configuration for all 3 other projects (e.g. to ensure consistency), and this project included responsibility for the HPM (Hydrocarbon Product Management – SAP component) / bulk materials configuration for all 3 other projects, then the customer would have 4 projects in total, but only have 1 project gaining value in the form of work time and effort from our solution, thus the value would be 1, equals 10 points.

Please select the appropriate result below:

BCP (Petroleum)

- 1 (10 points)
- 2-3 (20 points)
- 4+ (40 points)

BCG (Gas)

- 1 (10 points)
- 2-3 (20 points)
- 4+ (40 points)

Question: Usage - SAP System "Landscapes"

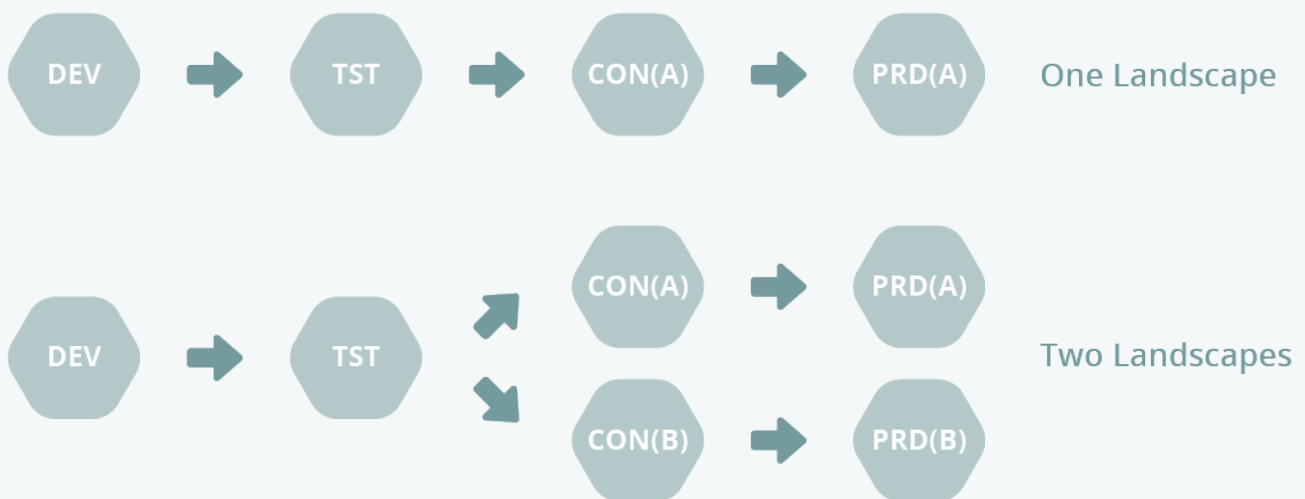
This area of benefits is based around the unified software delivery concept that SAP has furthered through its certification program - allowing partners to access and pass on the benefits of the unique SAP software logistics mechanisms to their customers.

By adopting such mechanisms, the QuantityWare solution reduces technical complexity and risk while supporting GRC (Governance, Risk & Compliance) standardization in what is a complex area for basis staff, implementers and the business. The QuantityWare solution is fully encapsulated within the SAP environment and is therefore platform independent and can be managed through common security mechanisms.

Support package and "Note" transport provision, when allied with simple- to-use test mechanisms and knowledge of upgrade mechanisms lead to risk minimization. This is a multiplier dependent upon the number of SAP systems i.e. "landscapes" in which the solution will be used.

A landscape is a group of SAP systems linked together via the SAP TMS, with a productive system at the "end" of the landscape,

For example:



In how many SAP system "landscapes" will the QuantityWare solution be used?

BCP (Petroleum)

- 1 (10 points)
 2-3 (20 points)
 4+ (40 points)

BCG (Gas)

- 1 (10 points)
 2-3 (20 points)
 4+ (40 points)

Question: Usage - External Interface Usage

GRC and Transparency are prime motivators in modern ERP environments.

The adherence to, and comprehensive support of, such principles helps not only mitigate risk of punishment in the case of non-compliance (not only by regulatory bodies, but also business partners and even the financial markets), but is widely regarded as good management practice and often required as "due diligence".

QuantityWare provides the ability to connect external systems for its measurement solution or to legacy SAP QCI measurement implementations, providing a single point of reference for calculations throughout all systems with network access to an SAP Oil, Gas, and Energy system in which the BCS is installed.

For further details see the "Web Services" chapter in the following documents:

- [BCP Documentation Reference Manual](#)

How many systems will be accessing the QuantityWare solution from SAP Oil, Gas, and Energy External Systems before the first usage review?

BCP (Petroleum)

- 0 (0 points)
 1-2 (10 points)
 3+ (20 points)

BCG (Gas)

Not applicable for BCG

Question: Usage - Product Measurement Specialist Group Size

Product Measurement Specialists are a vital part of any organization whose trade is based on such bulk products.

These experts are rare and their expertise and experience effects all financial, contractual and business aspects of the organization as demonstrated in our simple formula upon which bulk processing businesses are based:

$$\text{Profit} = \left(\text{Product Quantity} \times \text{Product Price} \right) - \text{Costs}$$

An organization should therefore try to optimize the efficiency of such experts and their support staff.

The QuantityWare solution provides these people a tool, closely linked to the configuration and customizing of productive business systems - allowing them faster and easier access to information upon which they can base their decisions and advice to the business.

Simulation of the effect of standards changes or validation of current practices is critical when providing advice to the business to allow tuning of processes, contracts or prices.

QuantityWare has produced many working papers related to such issues by utilizing the strength and stability of the BCS solution, which have then been downloaded by leading petroleum, gas and petrochemical organizations worldwide.

How extensive is the group of Product Measurement Specialist(s) (PMS) in your organization?

BCP (Petroleum)

- 1 PMS with 0-5 staff (10 points)
- 1 PMS with 6+ staff (15 points)
- 2-3 PMS with staff (20 points)
- 4+ PMS (30 points)

BCG (Gas)

- 1 PMS with 0-5 staff (10 points)
- 1 PMS with 6+ staff (15 points)
- 2-3 PMS with staff (20 points)
- 4+ PMS (30 points)

Your Results

Product Configuration

Please note the products you have selected, the total scale and usage points you have calculated, and select the Scale / Usage classifications based on those points below:

Product	BCP (Petroleum)	BCG (Gas)
Required	<input type="checkbox"/> Yes, BCP required	<input type="checkbox"/> Yes, BCG required
Scale Points	<hr/>	
Scale Classification	<input type="radio"/> National (0 - 29) <input type="radio"/> Continental (30 - 59) <input type="radio"/> Global (60)	<input type="radio"/> National (0 - 29) <input type="radio"/> Continental (30 - 59) <input type="radio"/> Global (60)
Usage Points	<hr/>	
Usage Classification	<input type="radio"/> Simple (0 - 74) <input type="radio"/> Standard (75 - 209) <input type="radio"/> Complex (210)	<input type="radio"/> Simple (0 - 74) <input type="radio"/> Standard (75 - 209) <input type="radio"/> Complex (210)

Supplements

Please select the supplements that you determined were required. If unsure, please see the notes on the Calculation Method page:

- BCP Condensate required
- BCG Hydrogen & Industrial Gases required

Next Steps

Complete Online

To view the total annual price for your selected BCS software and supplement configuration, please complete our online Usage Questionnaire form, using the answers you have provided.

Completing the online form will automatically confirm your organization's classification, and provide details of the expected costs:

<https://service.quantityware.com/usagequestionnaire>

Submit

Once complete, submit the completed Usage Questionnaire form to begin the process of entering (or renewing) an annual usage agreement with QuantityWare.

This is also a prerequisite for obtaining test BCS usage keys.

Sign Off

After submission, the questionnaire results will be forwarded to a specified manager at your organization, who will need to approve the results prior to further processing.

Processing

After sign off, QuantityWare will process the questionnaire results and be in touch to arrange your test BCS usage keys and a quote.

Calculation Method

We base our calculations for Scale and Usage, and thus annual price, on a points system used throughout the questions answered:

Scale	Points
National	0 - 29
Continental	30 - 59
Global	60+

Usage	Points
Simple	0 - 74
Standard	75 - 209
Complex	210+

Condensate Supplement

Condensate calculations require the use of a *petroleum* quantity conversion standard - this is not supported by BCG. Our BCP Condensate supplement allows you to perform these condensate calculations, and validate legacy calculations, without requiring the full BCP product.

BCP Condensate is required when **all** of the following apply:

- **BCG is selected**
- **"Condensate" is selected in the Products Groups Count question**
- **You don't require BCP, or require BCP at a scale lower than BCG**

The scale of the BCP Condensate supplement is set to match the scale of BCG and the usage is always Simple.

Hydrogen & Industrial Gases Supplement

BCG support for 100% hydrogen gas / hydrogen gas mixtures greater than 5% / other industrial gases requires the use of our Hydrogen & Industrial Gases supplement.

BCG Hydrogen & Industrial Gases supplement is required when **all** of the following apply:

- **BCG is selected**
- **"100% Hydrogen Gas / Hydrogen Gas Mixtures > 5% / other industrial gases" is chosen in the Products Groups Count question**

To learn which industrial gases this applies to, please [read our FAQ](#).

Annual Pricing

Product Pricing

BCP / BCG *

Scale	Usage		
	Simple	Standard	Complex
National	€ 7.700,00	€ 24.200,00	€ 38.500,00
Continental	€ 22.550,00	€ 53.900,00	€ 89.100,00
Global	€ 44.550,00	€ 96.800,00	€ 135.000,00

* A bulk discount of 30% is applied on the lower costing product.

Supplement Pricing

BCP Condensate **

Scale	Usage		
	Simple	Standard	Complex
National	€ 3.850,00	--	--
Continental	€ 11.275,00	--	--
Global	€ 22.275,00	--	--

** A BCP Condensate supplement discount of 50% is applied to all condensate supplements.

Hydrogen & Industrial Gases***

Scale	Usage		
	Simple	Standard	Complex
National	€ 3.000,00	€ 8.800,00	€ 9.400,00
Continental	€ 15.000,00	€ 17.400,00	€ 21.000,00
Global	€ 34.800,00	€ 37.800,00	€ 52.700,00

*** Required for BCG support of 100% hydrogen gas / hydrogen gas mixtures greater than 5% / other industrial gases

All prices represent annual Euro usage fees, excluding German VAT and any applicable foreign taxes, duties or levies. Prices are valid as at 2024-03-28 and are subject to change. If your organization: a) has a single product at the "National/Simple" configuration only, b) has fewer than 20 SAP Oil, Gas, and Energy seats licensed, AND c) processes less than 5000 BOEPD, a 'Small Customer Usage Fee' will be applied.