



"Global standard package IT Solutions like IBAS GBF, with ready-made and very flexible and adaptable solutions, implemented in a single place on a single system, running within a global multi-country set-up, where the main work will be carried out by robots, and with automatic upgrades of new releases - it's the only realistic and cost efficient way to handle a bank's global business."

*Rolf Hauge, CEO*



## Solution Profile: IBAS GBF – Global Banking Factory

"ABN AMRO Bank's global trade finance data and product definitions are all held on the bank's centralised IBAS GTF system, in The Netherlands, and this runs both our domestic and international businesses in a multi-country set-up on one single global system. IBAS GTF enables us to be mostly self-sufficient, with new country roll-outs being managed within weeks with minimum of resources involved and no development project required."

ABN AMRO Bank N.V., The Netherlands



## Modern Technology for Today and Tomorrow

CBA's stability and deep knowledge of the banking industry has meant we have invested for the long-term. We have always moved forward with our core platform, IBAS – International Banking Automation System, and have completely rewritten this in the last few years.

The IBAS GBF – Global Banking Factory is a new solution designed and developed on the latest technology (100% Java, object-oriented and on a Service Oriented Architecture – SOA) which has unprecedented flexibility and openness through its true component-based design.

IBAS GBF is proven in live sites and spans a broad range of areas, including: payments, trade finance, invoicing and factoring, financing and loans, forex & Money market, as well as account management - as a real global package solution, with outstanding results.

## Value from Ready-made and Easy Integration

Integration can be a daunting task and often a major risk for most institutions. Only when your new system is integrated into the many value and control chains - and how it fits and collaborates with existing systems - will it show an institution its real value.

Integration is an area where IBAS GBF comes into its own. Ready-made and standard interfaces, rule systems, parameterisation of components, specific integration enabling objects, and configurable messaging allows simple integration with most legacy systems.

## Rich Functional Coverage with Sophisticated and Highly Automated Processing

Serving customers well is as much about the functional coverage. Functionality for automating critical business processes is a vital issue for banks. The robust and full functionality provided through IBAS GBF comes from the company's deep knowledge and its critical view of the banking systems marketplace. Using parameters and rules, IBAS GBF can easily enhance banks existing offerings and be effortlessly adapted to increase time-to-market for new products - all without the system being compromised.

## Key Benefits

- Very Short Implementation Period, by few resources
- Extremely Low Implementation and Operational Cost
- Automated upgrades of New Releases, also protecting specific adaptations made for each bank

- Guaranteed Efficiency and Flexibility
- Improved and Increased Customer Service
- Able to handle greater business volumes and capability
- Improved accuracy and higher productivity.

## Main Features

- User friendly & efficient graphical user interface
- Developed in 100% Java, which provides:
  - Internet readiness
  - Platform independence
  - Scalable, secure & modular
  - Lightweight distribution model and thin clients; eliminates installation headaches and lowers maintenance costs
  - Easy development.
  - Multi-currency, multi-language and multi-country incorporated
  - Industry standard message formats (XML, SWIFTNet, ISO20022 etc.)
  - Industry standard relational databases
  - Multi-tier architecture.

*IBAS GBF is a proven and genuine modular suite of products, encompassing functions such as payments, trade finance, financing and loans, forex & money markets, core banking and account management.*

## Importance of STP

CBA's belief in the fundamental importance of STP and its siblings End2End and B2B is firmly stamped on IBAS GBF. The challenge of accommodating global communications is one of the most vital issues facing banking and factoring automation, and meticulous efforts have been invested to ensure that IBAS GBF rises to and meets this challenge.

This has been achieved by basing IBAS GBF on international standards, such as ISO and SWIFT, which in turn allows for information in public databases to be integrated.

IBAS GBF currently supports:

- Data downloads supported from SWIFT:
  - BIC Database Plus (based on ISO 9362), which contains internationally accepted ID's for financial and corporate institutions.
  - The Payment Directory and the Treasury Directory, which contain information relating to settlement instructions, value dates, charges, etc.

- Auto downloading of Information from other publicly available databases, such as from SWIFTRef:
  - Country databases (based on ISO 3166), where correct country names, UN country numbers and ISO country codes are available.
  - The International Bank Account Number, (ISO 13616), uses the national account number (BBAN) as a basis and creates an account ID that can be processed worldwide (IBAN Plus).
  - Currency and Funds Codes (ISO 4217) and Banking Holidays.
  - SEPA Plus
  - ISO/DIS 15022 Data Field Dictionary for securities messaging.

The benefits of a system which facilitates “clean” processing of banking transaction messages and information, i.e. without the need for human intervention, include: cost reductions; more effective risk and liquidity management; and, as a result, improved customer service and satisfaction.

### Technical Highlights

Imagine a world where programs could run on any processor without the need to rewrite or compile a single line; a world where programs did not crash due to stray memory references; a programming language that was modular enough to allow true code reusability; a language that supported multi-threading. Java does all this. IBAS is developed in 100% Java.

Aside from its GUI Front-End developed in 100% pure Java, other IBAS GBF features include:

- Object-Oriented System (OO) with large common objects, such as Payment Processors, Agreement Objects, Financing Objects
- Service Oriented Architecture (SOA) and WEB Services
- Component-based
- CBA’s object-oriented Data Dictionary System with a library of international banking terminology implemented
- Integrated Workflow Management and Monitoring System
- Integrated Service Level Management and Monitoring System
- Integrated Electronic File System.

### One common Global Package and on a Single Multi-Country Environment

IBAS GBF is a real global package solution with one single global source code, managed centrally across a multi-branch and/or multi-country set-up. The system allows a bank to implement the same levels of sophistication in any market it chooses to enter. In addition, it offers the option of using one single method of handling the business whilst adapting to local market requirements. Customisation of IBAS GBF can be undertaken using a bank’s own in-house expertise, eliminating the need to embark on costly, time consuming and risky IT projects. Whatever branch or country a bank chooses to install IBAS GBF, and whatever country customisations are required, the structure of IBAS will protect your investment for the long term. IBAS customers do not ever need to leave the global package solution, ensuring smooth and easy deployment of any future releases of IBAS GBF.

### Modular Means Solutions

The modular nature of IBAS GBF means that it can range from a total banking system to a specialist system for a niche product area, such as Trade Finance.

An IBAS Application is created by combining IBAS common objects, components and functional building blocks according to pre-defined specifications for the various functional areas within banking and finance. Solutions can be designed to fit specific customer needs. Such solutions are made up of IBAS Applications, which may be operated either singularly or in conjunction with other IBAS Applications. CBA can thus combine the various Applications to match each customer’s requirements. Consequently, IBAS is a system that is easy to adapt to changing needs.

### IBAS Product Areas

The IBAS Product Solutions (IBAS Applications) are grouped under relevant Product Areas, plus the IBAS GE Application, which contains the common core systems with the common objects, common data, common interfaces and common components.

**IBAS GPF – Global Payments Factory**

**IBAS GTF – Global Trade Finance Factory**

**IBAS GFF – Global Financing & Loans Management Factory**

**IBAS GIF – Global Invoicing & Factoring Factory**

**IBAS GAF – Global Account Management Factory**

## The Brains Inside the IBAS Solution

The main functionality is based on the IBAS Common Core System; we call it the 'brains' inside the solution. The core is made up of common tables, common rules, common programs, program modules and common objects and a common user interface all of which branch out to each individual IBAS Application:

- The combination of one or more IBAS Application then makes up the appropriate system required for a particular customer, and functioning at the level chosen by the customer.
- The major advantage of having one common core for the whole IBAS GBF is that it gives a standard starting point for installations anywhere in the world. IBAS GBF, therefore, travels well and requires only small country adaptations, depending on local requirements. The length and cost of installation is reduced considerably as a result.

## Growing Your STP Volumes

Already proven, IBAS GBF is the low-cost approach to achieving some of the world's highest and most successful STP payment rates. IBAS GBF supports a flexible set of parameters allowing it to operate intelligently. By eliminating operator errors from manual data input and repair, bank STP rates are increased by a minimum of 80%. The 'electronic user' can guide your staff through bank processes and policies.

## Decentralised Decision-Making with Centralised Control

A modern financial institution should be able to combine the safety of central control with the flexibility of decentralisation within one system. In IBAS GBF, operational decision-making has been decentralised to allow for better and quicker service to the customer, whilst the parameters and rules for such activities are fixed and maintained centrally by department heads.

## Monitoring, Reporting and Control

In order to be efficient, staff at an operational level rely on access to relevant and accurate information. IBAS contains a host of common tables and rule structures, all of which are utilised by each individual IBAS Application. These common facilities are not only a very efficient tool for execution of daily business transactions, but also an indispensable management instrument to monitor and control financial activities.

## Data Availability and Flexibility

Every IBAS user has direct access to relevant information stored in the system. Data integrity is ensured by the fact that all common system data is registered and maintained in one place, abiding to strict rules and regulations. Each IBAS Application contains ample enquiry and reporting facilities for daily operations. Ad-hoc reports and information are prepared by using modern and user-friendly tools, which provide access to the integrated data from the IBAS Applications. This flexibility provides users with information in any format they require.

## Adaptable to Your Structures and Routines

Modern means of communication allows IBAS GBF to be operated within different type of organisational structures. The system is designed in such a way that efficiency is not affected by geographical, physical or organisational divisions within the financial institutions themselves. CBA's consultants, in co-operation with the institution's own, are able to tailor their products, pricing and business rules and routines to easily meet individual requirements.

## Much Lower Cost of Ownership

IBAS GBF functionality is based on a single core system using a series of integrated common tables, rules and objects, and presented through a graphical user interface. It is fully component-based and object-oriented and has been designed and developed, from the outset, as a real global package solution, for fast implementation and without the need to embark on large customisation projects to meet every client's specific requirements. This approach significantly reduces development and maintenance costs, the needed resources, time and risk.

## Rapid Installation and Implementation

The modular structure of IBAS GBF provides high quality solutions tailored to each individual bank requirements. Thoroughly tested routines for powerful business operation are based on the experiences built-up from many installations at institutions around the world, and guarantees fast installation. These routines embrace a wide range of activities, from accounting and correspondence, to administrative procedures. This approach means IBAS GBF can be put into production very quickly, providing a rapid return on investment.

## Low Cost, Easy Adaptation for Competitive Edge

The process of bringing new products to market can often be time consuming and costly due to aging and unsuitable systems from another era. With IBAS GBF, the advanced rules and

**“It is through quick and flexible integration with existing systems without changing the core source code a modern banking system shows its true worth.”**

*Rolf Hauge, CEO*

parameterisation means you can easily adapt your existing product offerings and introduce new products quickly. This flexibility means you can regularly adapt your services to react to changes in the market and maintain a competitive edge on rival institutions.

### Fully Automated

IBAS GBF streamlines end-to-end processes through full automation of the daily business events. Relevant correspondence is generated automatically, and can be executed as a letter, fax, electronic message or S.W.I.F.T. Messages. The system provides tools to change layouts easily and quickly. Payments are automated as part of the business events and produce the relevant messages, including clearing messages. Accounting is also automated, either by updating external systems or by using the IBAS Account Management system. When business events are executed, the current and historical databases are updated automatically, and in real-time.

### Stringent Quality, Proven Stability

IBAS GBF has been proven at leading institutions around the world with outstanding results. Stability and quality is an absolute obligation in an industry where the consequences of system failure are very grave, both for the institutions and their customers. CBA's release system procedure follows stringent quality testing of the IBAS Applications and has been modelled on international quality standards.

### Designed with the Users in Mind

Customers are an important source of expertise. CBA has employed banking experts with high knowledge and worked in close co-operation with external banking experts. Our emphasis is always placed on satisfying the practical needs of the user. Behind the development of IBAS lies a myriad of needs analyses from different types of institution. We believe that this reflects our ongoing desire to deliver a solution that is automated on a very high level and genuinely prepare for international flexibility.

### Solutions that Simplify Daily Routines

The high-level of skills and expertise of our consultants combined with the traditions and expertise of many world-class institutions have all been exploited in IBAS GBF. The system guides the end-user through, using easy and logical structures, with the rules engine and the electronic super user looking after each step and advising the user on the next steps to be carried out. This type of functionality significantly increases

existing staff efficiency, and means less time-consuming training of new staff.

### Improved Control and Security of Operations

IBAS GBF automatically performs administrative routines and business events. Full automation reduces the risk of human error, and the statistics and logging facilities register irregularities in the system. IBAS GBF includes facilities for limiting user access to functions and databases, and a flexible authorisation structure that can be adapted to each customer's specific needs.

### Skilled and Competent Customer Support

CBA is very selective when recruiting new staff. All consultants have considerable experience from automation of banking and financial services, and actively assist CBA's customers during both the planning and the installation. Every member of our team must satisfy CBA's strict requirements for customer cost-efficiency and security.

### The IBAS User Group (organised by the IBAS user banks)

Customers benefit from an independent user group, called 'IBAS User Group' (IUG). The objective of IUG is for customers to co-ordinate activities of mutual interest, such as: development of skills, enhancements to the system, exchanging experiences, and discussing practical business issues.

### Find out more at [www.cba.no](http://www.cba.no)

Our customers include large and small banks, niche and universal players. From Singapore, US and Hong Kong to the Netherlands, the Nordic regions and beyond, we have delivered robust and flexible solutions, and have built relationships that have lasted and evolved over the years. Every one of our customers is important to us and always receives our full attention.

For more than 30 years, we have served the banking systems market well. Our focus has remained firm: product development, delivery, and customer service. And coming from the Nordic region, CBA is at the very heart of innovative banking.

