
# Working abroad as Financial Controller for the Airbus Group in Toulouse, France – Finance Controlling at a glance

By Thomas Hubert

This field report aims to convey interesting information on the subject of working at international level to the reader and to offer an insight into the working environment at Airbus. Here, I will present my own experiences, address the requirements of my own company and offer recommendations on various aspects of mobility. I will then take you on a trip into the financial world of Airbus and discuss the subjects of planning, reporting and business partnering.
Given that Program Controlling is of great importance in the company, I would like to conclude by presenting "Earned Value Management" (EVM) as a Project or Program Controlling Instrument.

Monday morning, 7am, airport Finkenwerder at the Airbus location Hamburg. Hamburg is the office of the executive board of Airbus Germany and with around 12,000 employees, it is the biggest location in Germany. **Worldwide, the Airbus division employs about 59,000 staff.** This means that almost every second employee of the **133,000 Airbus group employees is working in the field of aircraft construction**. **The core competences in Hamburg** are on the following areas: **cabin development center**, **development** and **production** of the forward and aft **fuselage sections** as well as **equipment** of the fuselage sections with all flight-essential systems for the entire Airbus fleet. **Hamburg is one of three final assembly** lines for aircraft of the A320 family (A318, A319, A320, A321). From here, the final assembly of the aircraft takes place and are delivered to customers all over the world. **The A380,** the flagship of the Airbus fleet, **receives the cabin definition, the interior furnishing and the painting**. Hamburg is as well the delivery centre for customers in Europe and the Middle East for the A380. The plant boasts many years of experience in the overall process chain, from structural assembly and equipment installation through to final assembly and painting.

## Each week 1100 employees fly from Hamburg to Toulouse

It is a typical morning at the airport in Finkenwerder. **Five days a week morning and evening, an A319 departs on the own Airbus airport towards Toulouse in the south of France.** In Toulouse, German and other European colleagues from all specialist areas come together to make their contribution to the trans-

national Airbus work sharing. Today, I am one of these colleagues and as a Financial Controller I am heading to France with around **1100 other Finance employees within the Airbus Division.** Little did I suspect of the experiences to come, when I decided to change my career path and move to France a few years ago. At Airbus, a change of job can happen very sudden and quickly.

With time, I learned that mobility does not only mean being able to change country or continent. **A simple change to a foreign working environment facilitates the learning of new working methods** and a reflection on one's own previous work. **This increases the wealth of experience** and allows a broader view. Being mobile also means developing one's strengths and compensating for any weaknesses. At the same time, it can enhance motivation and commitment. A new working environment and new framework conditions **lead to a change in personality**, both professionally and in private. One becomes a different person to the one who left for their experience abroad. It is when the typical German virtues, such as punctuality, reliability, diligence, perfection and orderliness, meet entirely different cultures and a unique composition of virtues is created on international level, that adjustment processes inevitably take place. **Something new is created; a European working culture.** It is this very diversity that forms the basis of a new type of high performance culture in the company and every single person becomes part of this culture. One should acknowledge that a certain degree of friction exists within this working culture due to its diversity, before committing to a work placement abroad.

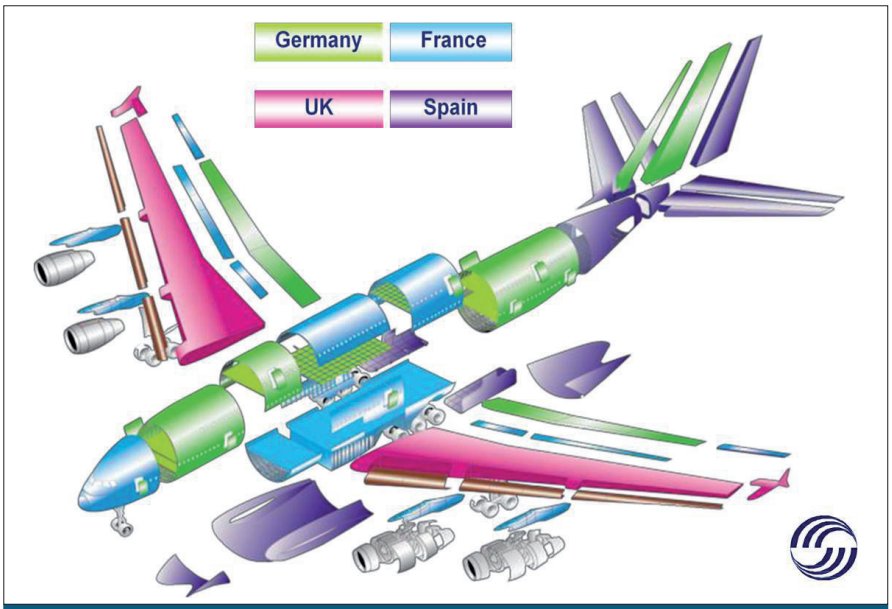


Fig. 1: International Work Sharing

## Multidisciplinary teams achieve better results

The Airbus group promotes internal mobility for further career development and personal and expert growth. The key words here are multidisciplinary or multi-national teams. The most diverse professional groups or international teams work together to achieve the best results possible. This shows especially in the problem solving behaviour. **While Germans usually go**

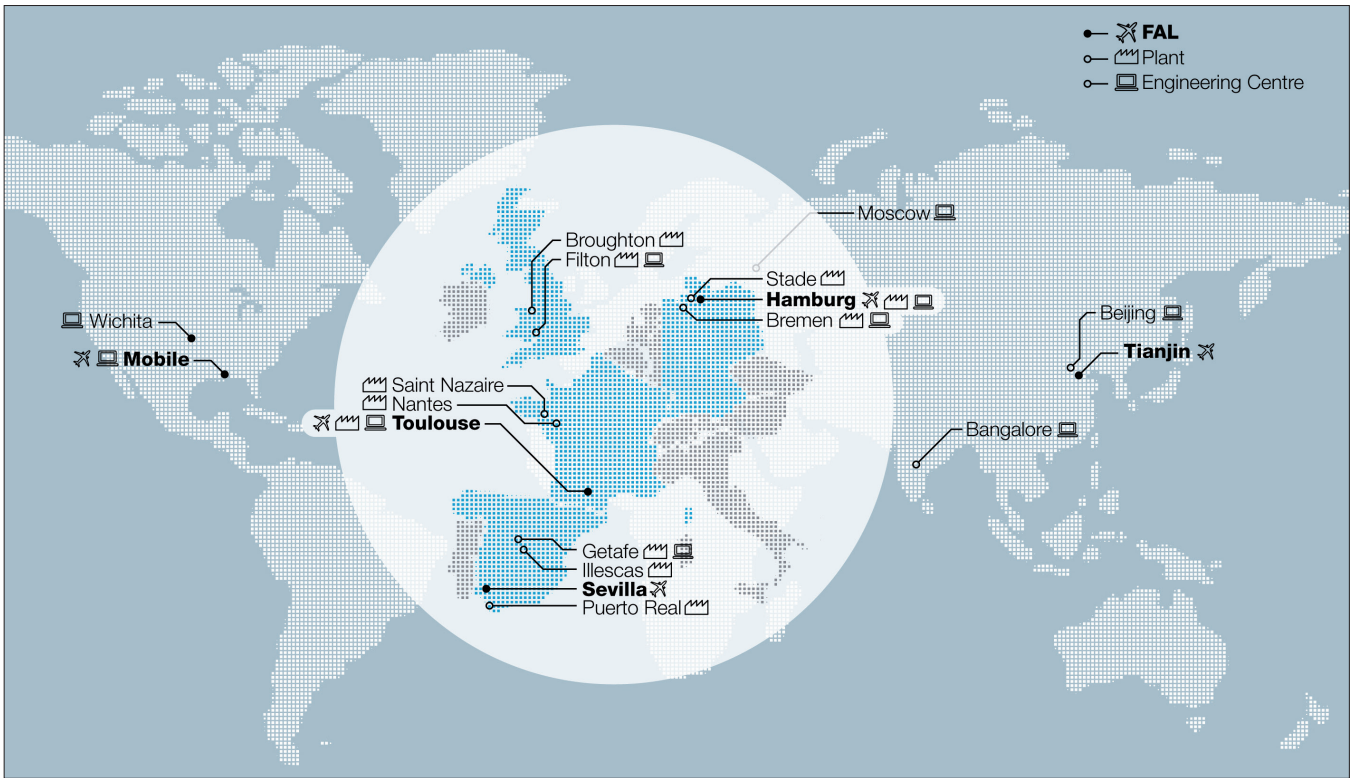


Fig. 2: Airbus Industry Locations

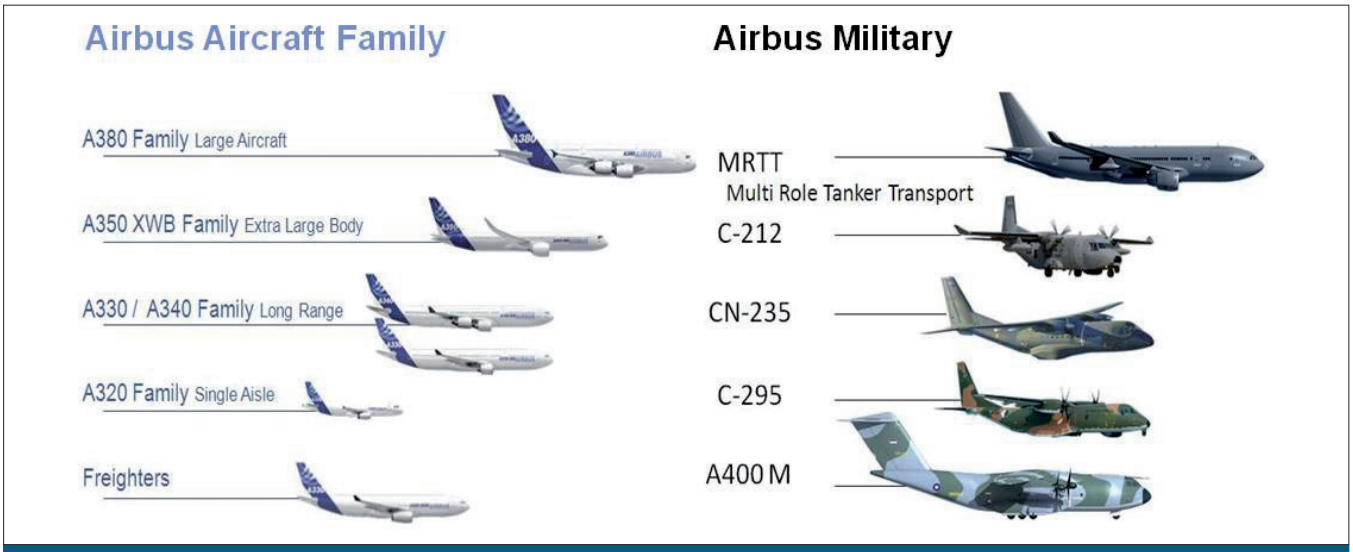


Fig. 3: Airbus Fleet

**for a safe solution, the French or Spanish often favour a more risky solution.** What really matters though is that the final decision, which leads to the problem being solved, is taken and backed together. **Studies have shown that heterogenic and multi-disciplinary teams achieve better results than homogenous teams.** They develop a far more detailed analysis of a problem and offer a broader portfolio of ideas and approaches. The diversity of the nationalities, cultures and education and professional training of its employees is an important foundation for the success of Airbus. This diversification promotes creativity, innovation, performance and commitment and thereby creates competitive advantages for the company. Therefore, one could easily imagine a job vacancy worded along these lines: **Airbus Group is committed to achieving workforce diversity and creating an inclusive working environment.** We welcome all applications irrespective of social and cultural background, age, gender, disability, sexual orientation or religious belief.

**In practice, this means that mobility is not only expected on an international level, it is clearly requested with targets in the various divisions and functions.** Change is not only a positive thing on a professional level, but also on a cultural one. Becoming familiar with one or even several new cultures inevitably leads to the acquisition of intercultural competence. For example this already begins with learning the manner in which one best conveys information to a French colleague. Germans are known for being particularly direct, which is not always helpful. The company offers intercultural training seminars to prepare for these issues.

Unfortunately, the opportunity to participate in a foreign placement is not offered by all companies. **Yet, mobility is not limited to spatial or social aspects, but it also includes the specialist perspective.** This simply means taking on tasks outside of one's current function (across business functions) in order to grow and diversify. As a consequence it is not unusual that an engineer will be assigned in the area of "Costing" (cost accounting) or in the field of "Engineering Controlling". The reasons are ob-

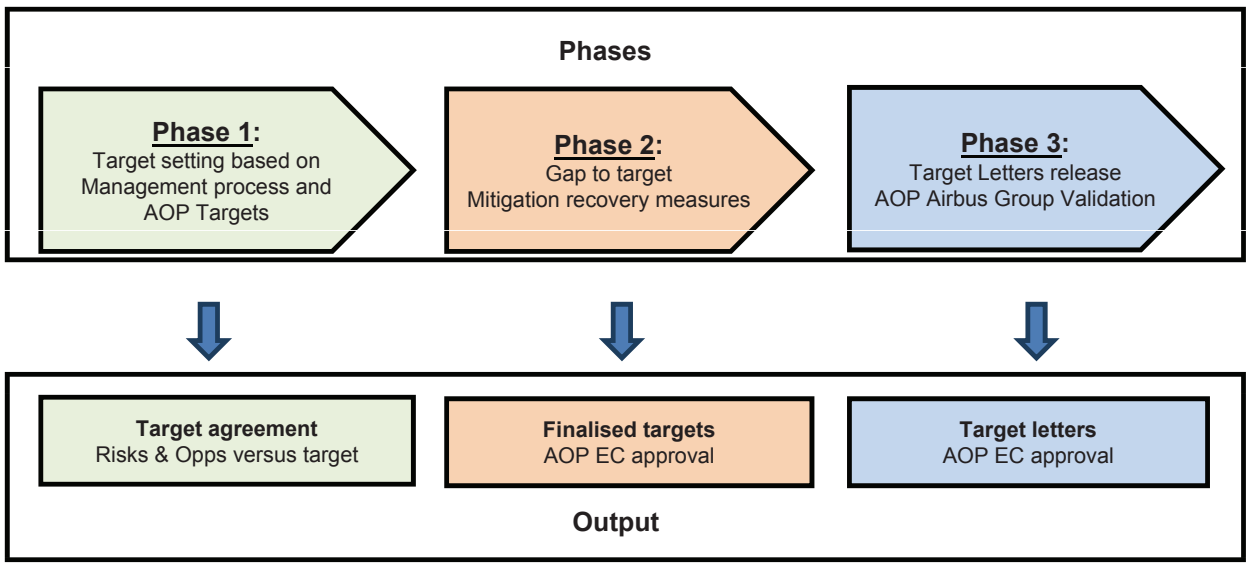


Fig. 4: Target Setting and AOP Process

vious. The engineer has a better technical understanding of the products and the associated processes if he has to calculate or control the costs. The requested fundamental financial knowledge will be acquired with on-the-job trainings. This means diversification also takes place within the Finance Function.

After a few years abroad, I am able to look back and acknowledge that working on an international level facilitates personal and professional maturity. **Given that English is the official language, at least fluent language skills are required.** It is of benefit to speak French as well. Previous international experience and additional German language skills are the perfect starting point.

Figure 3 shows an overview of the Airbus aircraft fleet that allows an impression of the individual civil and military aircraft types. Now that we know a little more about the company, I would like to offer an insight into the financial world of Airbus. Given that the aerospace sector uses vast amounts of abbreviations and terminology and that issues tend to be rather complex, I will stay close to the surface to make this article accessible to the ***general reader***.

How is the Finance division structured and which are the key roles?

**1) Operations:**

- Business Controlling: Preparation of business plans and finance targets, monitoring of their implementation and financial steering of Airbus.
- Costing: Product costing for new development programs and series programs.
- Subsidiaries Control: Controlling of the Airbus subsidiaries with respect to financial and performance indicators.

**2) Global Management:**

- Corporate Finance: Definition of Airbus' financial targets, planning, forecasting and reporting.
- Risk Management: Evaluate organisational risks and support of risk management in all areas (e.g. functions, programs, subsidiaries).
- Treasury: Management of financial transactions, maximisation of the cash position, receivables management and exchange rate hedging transactions.
- Tax & Customs: Taxes and customer management.

**3) Customer Analysis:**

- Customer Financing: Assurance of continued solvency of customers and financial support of customers in aircraft financing.
- Sales Control: Analysis and compliance with payment transactions pursuant to contracts concluded. Risk evaluation of customer financing.
- Financial Analysis: Financial analysis of customers and suppliers. Notification of risks and financial difficulties.

## Planning

Like any other large company, Airbus performs an annual planning (Airbus Operational Planning). **The planning process is divided into 3 phases:** The scope of the planning is usually 5 years. This excludes new developments, which need to be planned up to the point of completion and entry into service and this requires a longer lead-time.

The **first phase** starts with a **"Top-Down Target Setting of the Programs"**. This usually takes place in May. In this phase each program assign preliminary targets for the coming year to all functions who are working for this program. For series programs (e.g. A380, LR, SA), the respective profit & loss estimation serves a basis for these preliminary plans; for new development programs (A350, A400M), the entire costs at completion (TCAC account) are considered. At the same time as the targets are notified, the Program assumptions are released; e.g. the planned rate of production and major or minor modifications. This builds the basis for the bottom-up calculations of each function, which are subsequently compared against the program targets (Risk & Opportunities vs. target). At the end of phase 1, the executive committee (EC) of Airbus holds a review meeting. In this meeting, the current planning is validated, deeper questions may be raised and on the basis of the planning results, further directives for planning are issued.

In the **second phase of planning**, which takes place between July and October, the so called **"convergence meetings"** are held. The existing risks and potential opportunities are negotiated with the objective to mitigate as much as possible. In this phase, the different programs and functions discuss specific measures and actions for the achievement of the EBIT target. At the end of phase 2, another Airbus committee workshop takes place, in which all program targets and the remaining risks are discussed and finally approved.

In the **third phase of planning**, in November, **all divisional planning is presented and validated on Airbus group level. The distribution of the "target letters"** (budget letters) **at the end of November marks the beginning of the following year's budget phase.** The early distribution of the budget is needed as **Airbus outsources around 50%** workload from external suppliers which has to be commissioned (subcontracted) in due time. Each function (e.g. Engineering) will find the relevant annual budget for each program in this target letter. Once the budget letters are received, the individual functions will issue a position state-

**Autor**

**Dipl.-Wi.-Ing. Thomas Hubert**
Finance Controller at Airbus S.A.S., Toulouse.
E-Mail: thomas.hubert@airbus.com

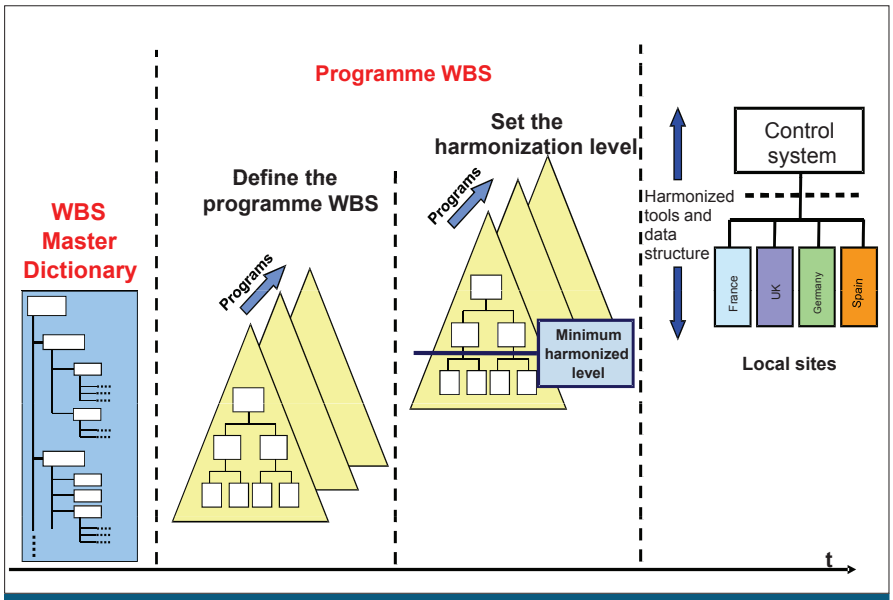


Fig. 5: Work Break Down Structure Process

ment that allows them to highlight remaining existing risks, before these are signed by the highest relevant manager.

## Reporting

Like many other large companies, Airbus uses **as standard SAP** with all **connected modules, for example FI, CO, PS, MM**. However, this system is more utilised f**or accounting purposes in particular,** as each country has its own SAP structure. The assignment of internal hours booked with **the internal hourly rate is largely performed in SAP CATS** (Cross Application Time Sheets), although the international harmonisation process is not completed. **The SAP BW (Business Warehouse) facilitates the transnational standardisation and cost consolidation.** This is the baseline for the development of transnational reporting. While **harmonized transnational cost element groups serve to summarise the individual national cost element types on the cost centre side (CCC)**, the **consolidation of the cost units** (CBD), i.e. on the program side, is **based on corporate project numbers (CPN)**. In effect, **the costs per program and by country are subsumed in one CPN** to get the transnational costs. The total costs for a program (e.g. A380) are finally the aggregation of all the various CPNs. Both **Reporting** and **Planning** additionally use the IBM Cognos **Tool TM1**.

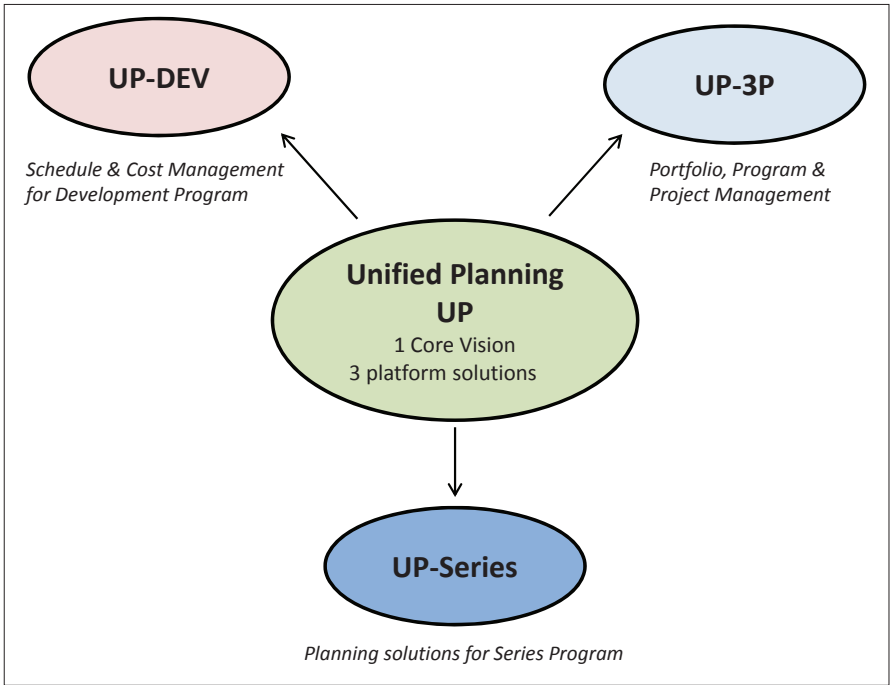


Fig. 6: UP Program Platforms

**To facilitate uniform and integrated project steering** on an international level, **the "Master Work Breakdown Structure" (MWBS) was defined for all programs** in 2002. It allows the provision of a uniform transnational structure for all works and aircraft parts in aircraft construction. Based on this harmonised structure, each individual program, whether it is a new development or a series program, can define its own WBS structure. This is illustrated in the figure 5.

## Business Partnering

**Business Controllers are employed by business function**, e.g. procurement, production, engineering and program. With more than **700 employees,** this is the largest section of the Finance Function. Their area of responsibility comprises all the usual tasks of a Financial Controller: **Responsibility as a co-pilot for management, identification of key drivers** of financial performance, **variance analyses between targets** and actual results and the implementation and monitoring of **corresponding corrective measures**, pro-active and timely provision of relevant information for the **preparation of management decisions, performance measurements** and **creation of transparency with regard to risks and opportunities.** This includes the budget and target management of the programs, i.e. the implementation and monitoring of budget adjustments throughout the year, as well as the preparation of reports and annual budgeting.

Within the different Finance functions, the work contents can **vary a lot**. **In Engineering, for instance, very detailed workload planning on an hourly basis takes place**, i.e. the costs per program are budgeted in internal and external workload in hours; on series program level on the other hand, budgets are increasingly based on driver models and unit costs. Theory and practice are conveyed on various levels.

Airbus utilises tutoring, i.e. experienced Controllers support and **coach newcomers**; **a variety of handbooks** and organisational documents support theoretical learning. On top of this, **Airbus' own Finance Academy offers customised finance seminars to train its employees properly. Not only is the theory taught, but practical situations are practiced in role plays.** The following list of expertise and skills that the Business Controller is required to utilise on a daily basis provides a better picture of the typical professional: *Planning & Forecasting, Financial Reporting and Mitigation, Financial Risk Estimates, Knowledge of the Business Model, Cost drivers awareness, Financial KPIs, Financial Systems (SAP, BW, TM1), Function Controlling processes and tools, Controlling procedures and tools, Accounting principles, General Ledger (IFRS), negotiate & influence, to sum up and analyse information, build & manage internal customer relations, develop "win-win" solutions, communicate and influence, cross-functional team working, facilitation & conflict management, intercultural relationships, best practice handling, Ethics & Compliance in Airbus.*

| | UP DEV | UP Series | UP 3P |
|---|---|---|---|
| Customers | A/C development projects | Series Programmes and transition from Dev | Non A/C related portfolios of projects |
| Characteristics of managed projects | • Flexibility & management<br>• All aspects of PM integrated (Workload, time, cost …)<br>• Earned Value & new NRC controlling model<br>• One project (=A/C) broken down into a network of interdependent projects | • Stability & monitoring<br>• Time mainly. Cost managed through other processes<br>• Many projects (= one for each MSN of each programme) | • Steering & support to decision making<br>• Integrated aspects of PM (Workload, time, cost …)<br>• Mainly independent projects |

**Fig. 7: UP Fields of Application**

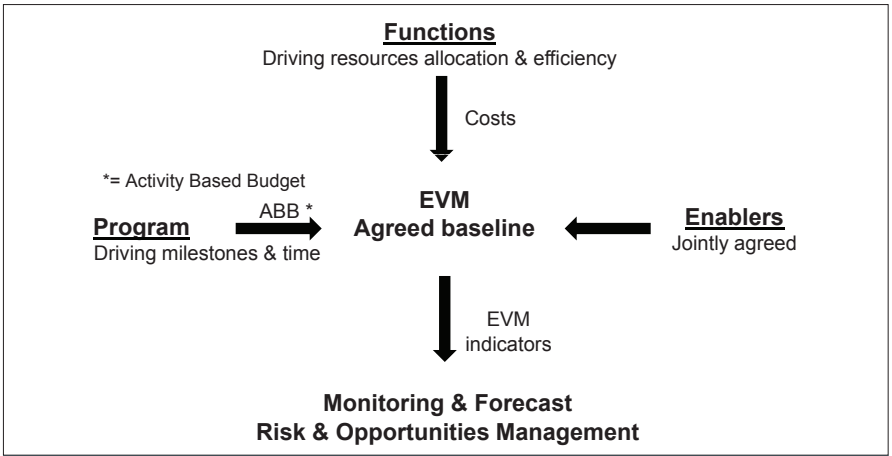


**Fig. 8: EVM Controlling Process**

## Earned Value Management

Any literature search for project controlling or progress evaluation will reveal the term 'earned value analysis' (also 'earned value method' or 'labour value analysis'). It expresses the current schedule and cost situation through KPIs. The key values are the planned value, actual costs, and the earned value. These performance indicators allow a precise trend analysis. In this model, the earned value is the central performance indicator for the control of project progress and the corresponding costs. The German series of DIN (Deutsche Industrie Norm) standards 69901 in fact gives all five parts defined for project management; fundamentals, processes and process model, methods, data and data model, as well as project management terms.

With the start of the new development of the A350 **in the year 2008**, Airbus developed and **introduced the Unified Planning Tool (UP) for Airbus on the basis of web-based software of Planisware as a uniform project earned value analysis tool.** It is a project and product portfolio software solution that maps the time, financial and capacity axes. **Due to its flexibility in customisation, it is particularly suited for the management of large, complex new development programs and improves steering and program performance.** The enhancement of program steering (performance measurement) and of program management (performance management) are of fundamental importance to Airbus in the accurate steering of future projects or programs in accordance with strategic objectives. This is known as "EVM adherence". Therefore, its scope is no longer limited to new development programs, but it is now also deployed to series programs or research programs, since it ensures a greater degree of clarity and transparency in project management and facilitates timely decisions.

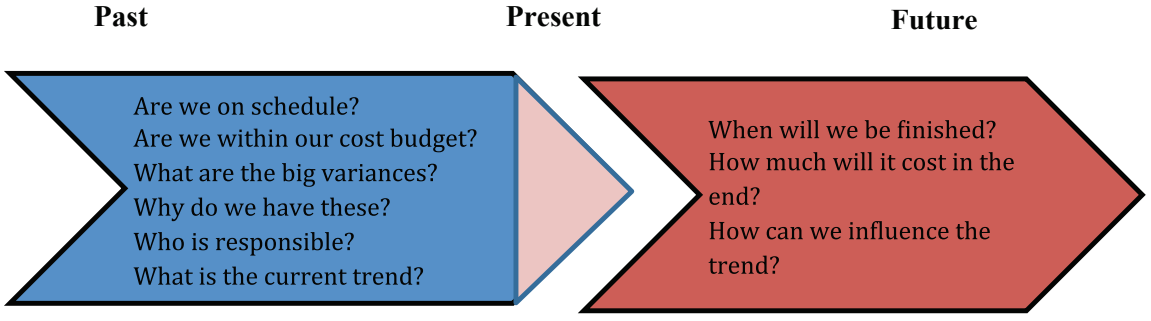


**Fig. 9: EVM Controlling on the Timeline**


| 2012 | | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BASELINE | % | 8.1% | 26.5% | 42.7% | 50.7% | 56.4% | 63.0% | 67.7% | 72.4% | 82.5% | 87.2% | 91.5% | 100.0% |
| | NO | 9 | 29 | 47 | 56 | 62 | 69 | 74 | 79 | 91 | 96 | 101 | 110 |
| ACHIEVED / FORECAST | % | 4.8% | 19.0% | 34.2% | 38.9% | 49.3% | 59.2% | 65.8% | 71.5% | 82.5% | 85.3% | 91.5% | 98.1% |
| | NO | 6 | 21 | 38 | 43 | 54 | 65 | 72 | 78 | 91 | 94 | 101 | 108 |

| 2012 | | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BASELINE | % | 8% | 16% | 25% | 33% | 41% | 50% | 58% | 67% | 75% | 83% | 92% | 100% |
| | ME | 1.0 | 1.9 | 2.9 | 3.8 | 4.8 | 5.8 | 6.7 | 7.7 | 8.7 | 9.7 | 10.6 | 11.6 |
| EV | % | 5% | 14% | 21% | 24% | 33% | 45% | 54% | 64% | 75% | 80% | 92% | 98% |
| | ME | 0.6 | 1.6 | 2.4 | 2.8 | 3.8 | 5.2 | 6.3 | 7.4 | 8.7 | 9.3 | 10.6 | 11.4 |
| ACTUALS | % | 7% | 17% | 31% | 43% | 52% | 64% | - | - | - | - | - | - |
| | ME | 0.8 | 2.0 | 3.6 | 5.0 | 6.0 | 7.4 | - | - | - | - | - | - |

Fig. 10. Theoretical Example of EVM

**EVM** should **not be seen as a pure software tool**; rather, **it is an integrated project management process**. The entire project or program flow is planned simultaneously on the time and cost axes according to milestones in each program section. In this planning phase, an integrated planned value (baseline) is determined for milestones and budgets for a pre-defined project progression. This process is then illustrated graphically (figure 8).

When all the work is completed, **the current budget is determined as "earned value"**. Now, **time and cost variances can be analysed.** Only this perspective allows the program manager to determine significant drivers, perform future cost and performance planning and implement adequate corrective measures to return the program to its original planning (baseline). **The objective is the early recognition of any variance in each of the program milestones and the early initiation of suitable counter measures.** A consistent implementation of this program steering technique in the aerospace sector can also be found at NASA (National Aeronautics and Space Administration).

## Final remarks

I hope that the reader has gained an insight into the financial world at Airbus and some encouragement on the subject of placements abroad. The new shareholder structure at Airbus, with more than 70% free-float shares and the retreat of the governments from ownership also brings a new era in the field of finance. The belts are tightened and a clear target of 10% in returns on sales (ROS) at both divisional and Airbus group level has been defined. Finance will be at the very heart of Airbus more than ever. It is essential for the achievement of the EBIT targets that have been promised to the capital market and the shareholders. This requires Business Controllers. As a co-pilot, you ensure that the flight path will be achieved...a target is a target!

## Index of abbreviations

A/C Aircraft, AOP Airbus Operational Planning, CBD Cost by Destination, CCC Cost Center Cost, CPN Corporate Project Number, EC Executive Committee, EIS Entry Into Service, EVM Earned Value Management, NASA National Aeronautics and Space Administration, ROS Return on Sales, TCAC Target Cost At Completion, UP Unified Planning