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DEFINING BULL'S STRATEGY IN THE BANKING SECTOR

GROUPE BULL

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In May 1991, Groupe Marketing initiated a project to identify opportunities in the banking market and develop the strategic approach to exploit them. The study focused on retail banking in France, Italy, and Spain, three countries where Bull has a strong position. In each of these countries banking is the largest sector, accounting for 20% of 1990 consolidated revenues.

Our conclusions rely on comprehensive field interviews with nearly 55 banks, on workshops with McKinsey sector experts, and on a number of external studies. They have been considerably enriched by continuous sharing of ideas and information with the countries' Sales and Marketing organizations, as well as with Groupe Marketing and CSP.

This memorandum summarizes our findings on key trends in the banking market, describes Bull's segment and overall strategies, highlights organizational implications, and proposes a process to make it happen.

Since we have not developed a perspective on Bull's strategies in banking relative to other segments, we assume that Bull understands banking at least as well as other sectors, and that banking is a top priority for the Groupe. We also assume that Bull has the strategic intent of being an important player in banking, and will therefore support even marginally profitable proposals if they are of strategic importance.

SUMMARY OF CONCLUSIONS

Overall, we believe that Bull can remain a major player in France, Italy, and Spain by developing systems integration (*) capabilities, building on selected but strong partnerships. This effort would require investments in the range of \$ 18 to 23M (to be confirmed for central systems), and would allow Bull, if successful, to maintain a contribution of \$ 132M by 1994. It will not however prevent an erosion from the current level of \$ 156M in 1990. Specifically:

¶ Bull's traditional market position concentrated in central systems (GCOS8) is eroding rapidly despite substantial efforts expended by each country. Specifically, Bull's revenue base in Italy and Spain faces the risk of disappearing in as short a time as seven years, while France's appears more secure.

^(*) By systems integration, we mean the capability to deliver full solutions by taking responsibility over large projects which include activities such as, systems and organization diagnostic, functionalities definition, technical and application architecture definition, hardware and software integration, software development, implementation, maintenance. The following skills are particularly required: sectorial expertise, project management skills, and knowledge of IT components.

- ¶ Bull should protect its central systems through investments on a customer vs general product line basis, while adopting a systems integrator strategy to penetrate the distributed systems segment (branch automation and self-service).
- Implementing such a strategy will require significant skill building, and in this context, projects agreed upon in principle by the three countries seem to be the best first steps towards initiating the change process. These projects would focus on, the protection of central systems, the branch with the objective to obtain a reference in each country on which to build credibility and develop a state of the art offer, and the development of a new small bank solution with selected partners.

BULL IN THE EVOLVING BANKING MARKET

The rapid evolution of the banking market calls for a segmented approach. In this context, Bull's current revenues and profits are heavily dependent on one segment, central systems.

- Three industry shocks (a profit squeeze, the increasing sophistication of the customer, and the "electronics" revolution) are changing the banking landscape and influencing banks' information technology choices towards: a shift of focus from product to customer marketing, a desire to share EDP expenses, and an increasing involvement of general managements in ITS decisions (Ex 1).
- These shocks are prompting a redesign of the IT architecture of banks: a separation of front-line systems from centralized data processing, served by a common database. This allows banks to add functionalities while leaving the old operative systems mostly untouched (Ex 2).
- Consequently the traditionally homogeneous banking sector calls for a segmented approach. Five major product/segments can be identified. For large- and medium-sized institutions: central applications, dedicated applications, distributed systems (branch and self-service), and networks. In small institutions, all of these decisions are taken simultaneously, creating a single segment. Two segments are of prime importance: central systems which is the largest accounting for about 45% of the total IT expenditure, and distributed systems with about 30% of the total (Ex 3).
- Bull's revenues in banking derive chiefly from its position in central systems, which accounted for 58% of total revenues of \$ 499M, and 75% of total contribution of \$156M in 1990. This position is however eroding. The importance of other segments depends on the country: an installed base of 10% of the branch market in France, 20-25% of the small banks in Italy, and 50% of EFTPOS in Spain (Ex 4).

In order to remain a top player in banking, Bull must follow a segment specific marketing strategy.

SEGMENT STRATEGIES

Each country analyzed should be present in two strategic segments: the distributed systems segment, and central systems. Other segments, namely small banks, call for an opportunistic approach.

Central applications for large and medium sized institutions

Bull's position in mainframes will continue to erode. However, since mainframes are of strategic importance in banking, Bull should take immediate and Europe-wide actions, on a customer by customer basis, to slow the current erosion.

Situation

Central systems is the largest segment, accounting for about 45% of the total IT expenditure in banking, but is expected to have a slower growth rate than the average. It is dominated by IBM in all countries (Ex 5). This segment generates for the three countries 58% of the total revenues, and 75% of the total contribution (Ex 4C and 4G).

Although the GCOS8 value proposition is currently inferior to MVS's (Ex 6), high switching costs do not justify by themselves the decision to leave GCOS8 (Ex 7). Two situations, however, have incited switching:

- Mergers of GCOS8 customers with MVS institutions, creations of shared EDP facilities, and complete redesign of obsolete information systems which have disproportionate maintenance costs, have eliminated the barrier to switch (Ex 8).
- ¶ General Managements' overall concern about long term viability of Bull has led to "political" decisions to switch. Generally GCOS8 has been replaced by MVS (Ex 9).

Over the past 3 years Bull has lost nearly half of its customer base in Spain and Italy, while it suffered more limited losses in France (Ex 10). A model we have developed shows that a large proportion of the current customers have engaged or are likely to engage in a switching process, resulting over the next 3 years in a further 20 % loss in revenues in all three countries (Ex 11).

In the face of this evolution, a starting hypothesis was that a surrounding/augmenting of existing GCOS8 by Unix machines, using DCM, would be an adequate response to customers, gradually leading to a total replacement of the mainframe. Unfortunately, our research suggests that this will not be the case for the next 10 years or so.

Mainframes will continue to play a dominant role in banking architecture in the short and medium term, for business structure, cultural, technological, economical and organizational reasons (Ex 12).

- Downsizing of processing power, even if technically feasible, is not a trend for the short term as benefits for the customer are not clear yet. In particular, the still to be proven savings of a solution based on smaller machines with lower MIPS costs, are vastly offset by the need to rewrite the aplications. Furthermore, when some downsizing is considered, it is generally conceived within the same operating system environment (Ex 13).
- ¶ Lastly, there are still acceptance problems with Unix in central systems (Ex 14).

DCM has nevertheless advantages in the short term for the central systems segment. It can provide loyal GCOS8 users with a model allowing them to build an architecture addressing the bank's problems in an increasingly integrated way. With the advent of Unix mainframes it may become a viable alternative to GCOS8 (Ex 15).

Strategy

Bull's primary objective in this segment is to maintain a critical mass of GCOS8 revenues until Unix and DCM become a viable alternative, at which time Bull will be able to push migration of existing customers and leverage this experience to attack new customers (Ex 16). In order to retain its customers, Bull should provide them with a credible evolution road-map, which guarantees the protection of their investments.

As a result Bull should:

Selectively invest on a customer by customer basis to limit the perceived value proposition gap with MVS, and promote loyalty to and perceived value from Bull in order to protect market share. Investments should be the minimum required to prevent switching, profitable on their own, and preferably common to several customers. Furthermore, Bull should create a "European club" with its loyal GCOS8 customers to limit their isolation feeling, and promote loyaly at top-management level (Ex 17). This effort would also allow Bull to ensure that all existing possibilities are best used by customers.

The exact amount that Bull needs to commit to protect its base, will come from the customer by customer assessment of needs. However, the net present value of extending the life of the cash flow stream by one year is such (approximately \$25M) that substantial investments can be justified (Ex 18).

Promote DCM and Unix to speed their acceptance versus MVS, and be prepared to be the first to market the products/solutions as soon as they become viable alternatives, whether developed internally, or outsourced (Ex 19).

In the short term, systems integration capabilities are necessary to be a participant in the current mergers of EDP centers involving GCOS8 customers. In the longer term, such skills will be key to help customers migrate to a Unix/DCM environment. As a system integrator in an increasingly standard environment, the following factors become crucial: time to market of advanced technologies, excellence in execution, and partnerships with European and/or local ISVs.

Distributed Systems

All banks have engaged or will engage in the replacement of dumb terminals by PC-based workstations linked by a LAN, and will increasingly use self-service to reconfigure some of their standard branches. Bull has an opportunity to capture market share in this segment in all three countries if it adopts a systems integration approach, and builds several reference solutions jointly with selected customers. Spain offers an opportunity in branch systems which must be seized immediately, while France should probably be the testing ground for self-service.

Situation

Distributed systems is the second largest segment, accounting for approximately 30% of the IT expenditure in the banking sector. It enjoys growth rates above the market avenrage (Ex 3C).

The branch is one of the key priorities for the banks who have engaged or will engage in the replacement of dumb terminals by PC based workstations linked by a LAN. This architecture allows a degree of independence from central processing while permitting communication with it, and is required to achieve the needed productivity gains, improved service levels, and increased sales and marketing capabilities in the distribution network (Ex 21).

Banks look for standard technologies for their branch systems, and have three major alternatives for the choice of the technical platform: OS/2, MS/DOS, and Unix. Unix is not yet perceived as a mature technology but meets buyers' key expectations better than the other two alternatives, particularly at the server level. For the server, scalability and price/performance are key for those banks who plan to have more power at the branch level to accommodate higher levels of office automation and sales and marketing support (Ex 22).

Projects to equip branches typically take 2 to 4 years. For large projects, the market divides into two rounds, one where a systems integrator is chosen on the basis of its skills and reputation, and the other where hardware suppliers are selected mainly on price. The system integrator proposes a solution which includes, in addition to the technical platform, the application and development software, and services for the design and implementation of the solution in part of the network. The hardware vendors are involved in the second round for the roll-out to the entire network (Ex 23).

The situation of the market in each country differs significantly in terms of existing level of branch automation (Ex 24), remaining opportunity to participate in automation projects, and supplier dominance. Specifically,

- France is the most advanced country in terms of branch automation, in a market dominated by IBM and where OS/2 has become the prevailing standard. For the next 3 years approximately 80% of the market can be considered as "closed" because implementation is completed or underway, or a final decision has already been made (Ex 25).
- In Italy, a market dominated by Olivetti (50%) and IBM (43%), 90% of the branches need to streamline their processes as only 13% are equiped with a PC/server/LAN configuration (Ex). Additionally it is the only market where new branches are being opened at the rate of 1000 branches a year (Ex 26).

In Spain, over 80% of branches are still equiped with dumb terminals. The situation, however, will evolve very rapidly as 60% of banks have undertaken projects to overhaul their branches. Savings banks, where Bull is more present, are less advanced in this process (Ex 27).

Self service will be a viable option for banks if it is part of a segmented client service strategy combined with an integrated approach to the redesign of the banks' processes. Today, current tests by banks show that self-service equipment is not profitable, primarily because banks added those systems to their existing branch infrastructure without integrating them into the redesign of their distribution network and internal processes (Ex 28).

On the ATM front, the market is close to maturity in France, Spain, and Italy. The market is dominated by two "European scale" players, NCR with an increasing market share, and IBM with a stagnant share, and by local players who have a strong share in one country only (Ex 29). Unless Bull can profitably penetrate other markets, i.e. banking markets in "new countries", or non-banking markets, a viable manufacturing strategy is unlikely in this product line, and Bull should consider either strategic alliances or pure outsourcing of these necessary, but standard, components

Bull's only significant presence in the distributed systems segment is in France mainly because of non recurring successes with CTOS, and a strong drive in ATMs, but opportunities do exist in each country. The lack of success so far in distributed systems can be attributed mainly to poor offer coupled with both delays in bringing products to market, and skills gaps (Ex 30)

Strategy

A systems integration approach is essential to successfully tap this segment's potential. Specifically, Bull will penetrate this segment by providing banks with the following benefits: fully integrated and customized branch solutions based on standard but advanced components which can be manufactured or outsourced, the capability to handle turnkey projects locally, a high reliability in project conduct, and superior post-sales service (multi-vendor support, timing of response and quality of people) (Ex 31).

In order to achieve this objective, Bull should complement overall skills - integration and project management, partnerships to ensure first-tier status with suppliers and ISV's, and execution skills - with branch specific investments. Namely Bull needs to:

- Adopt and promote a common development platform which allows to integrate both vertical and horizontal application development tools, advanced technologies (such as imaging and multimedia) and standard technologies, into an advanced technological infrastructure (integrator) allowing to run and manage multiple applications. Solutions on Unix should be given the priority (Unix-Unix and Unix-MSDOS), while the offer should be complemented with OS/2 (Ex 32).
- ¶ Develop a thorough knowledge of banking operations, and leverage this knowledge to identify specific functions/processes that offer opportunities for focused investments
- ¶ Build strong relationships with banks' branch network management and marketing function

In the emerging self-service market, Bull's objective should be to quickly build credibility and critical mass, leveraging its knowledge of and focus on the branch. Bull should, in addition to the requirements described above, promote and demonstrate the potential of available technologies applied to self-service solutions in the combined restructuring of the branch infrastructure and the bank's internal processes.

The development of a presence in distributed systems adopting a systems integration approach is likely to be profitable. The revenues generated could reach between \$ 60 and \$ 80M overall, i.e 12 to 16% of the current revenue base and profits between \$ 7 and \$ 14M. This strategy will require investments which can be estimated at, \$3M (Ex 33). Opportunities in each country are as follows:

- ¶ In France, Bull stands a good chance of winning share in the following areas:
 - Short-term, by aggressively attacking the remaining open market with a Unix solution. The opportunity can be estimated to range between 1100 and 1800 workstations annually in the next two to three years, generating revenues ranging between \$ 11M and \$18M.

Furthermore, Bull, or ZDS resellers, can expect to gain a reasonable share in the remaining "box" market for banks which have already made their choice but are still in an implementation phase.

Medium term: offer a Unix server and a migration process to the banks who have made a choice in favor of OS/2 and need additional power or functionality, and take a share in the self-service market. The opportunity here could be estimated at around \$ 16M in annual revenues.

Overall annual revenues in distributed systems (excluding ATMs) could range between \$27M and \$34M with contribution ranging from \$3.8 and \$6.3M.

In Italy, Bull's chance resides in a Unix based server solution to attack the banks still equiped with terminals, and those not yet equiped with a server. While any offer of OS/2 would bolster Bull's image in Italy, it is likely to result in few sales given the intensity of the competition from IBM, and the overall resistance of the market to OS/2.

The potential for Bull can be estimated at around \$18M in annual revenues with contribution of \$2.7M.

In Spain, Bull stands a good chance of winning several of the dozen projects currently being undertaken, if it promotes quickly a Unix solution. Bull should also focus its efforts on savings banks where it enjoys a stronger presence. Today, savings banks trail regular banks in their branch redesign decision.

The potential for Bull can be estimated to range between \$14 and \$27M in annual revenues with contribution ranging from \$0.4 and \$5M.

Small banks

Situation

Small banks are the third largest segment, accounting for 10 to 15% of IT expenditure in banking (Ex 3C). Moreover there is no evidence leading us to believe that they will disappear in the near future (Ex 34).

Their lack of IT resources leads small banks to think through their central and local architecture simultaneously, choose their hardware as a result of the desired applications; they also require both turnkey services to integrate and install the solution, and specific services in their day-to-day operations (Ex 35).

Bull's current situation in each market varies markedly (Ex 36).

- In Italy, IBM dominates the small banks segment, but Bull has developed a significant presence as a result of its attractive packages. While its presence in ordinary, popular and savings banks, is at risk, it holds a solid 32% share in the growing rural banks market (Ex 37). With the salesforce, we have estimated that in the next 3 to 5 years, Bull faces the risk of losing half of its non-rural banks customer base, which account for 54% of the revenues in this segment. This loss can be traced to mergers, or outsourcing of information systems to facility management centers, and IBM dominance.
- In France, Bull's presence in this segment is limited. It has 12 significant customers out of which 8 need to completely redesign their systems in the next 2 to 3 years. Bull expects that the current plan to package the Banque de Savoie solution will allow to retain the majority of its current customers. Significant competitors in this segment are IBM, DEC, and Tandem. The analysis of the current solutions on the market show that none fully meets small banks' needs (Ex 38).
- ¶ In Spain, Bull is quasi absent from this segment. Given the limited potential of such an effort, Bull should not focus on small banks at this stage in this country.

Strategy

Bull's objective in this segment is to consolidate existing positions, and pursue penetration in Italy and France. It will succeed by offering, with a group of partners, turnkey and economic solutions which provide great flexibility in IT organization choices, full safety in the project implementation, and a full set of services which address small banks' daily systems operations needs (Ex 39). To achieve this objective, Bull should:

Pevelop the core of a full, modular and integrated banking package at a European level, leaving the "localization" and finalization of some modules with differentiation potential, and customization to local partners. This package first developed on GCOS7 should be built in a way which allows easy migration on Unix when Unix mainframes for small banks are available. More importantly, Bull should consider building a unique feature: the option for a group of banks to share production applications, which are not strategic, while retaining individually the more strategic sales, marketing, and MIS applications (Ex 40).

¶ Build a network of partners for the development, marketing and customization of the solutions (Ex 41).

Once France and Italy have developed the core European package, Bull should consider pursuing opportunities in other countries.

The strategy in small banks requires investments which can be estimated at \$5M (to be assessed more precisely). Bull would reach breakeven if it succeeds to gain a total of 25 to 30 banks with this package. On the basis of 40 banks, Bull would generate total revenues of \$9.6M and contribution of \$4.2M annually (Ex 42).

Other segments

Early on, we agreed to scan for opportunities the other segments rather than study them in detail. We have summarized below the situation and current hypotheses at this stage.

Interbanking opportunities appear every 5 years. In as much as they are driven by banking federations and associations, Bull should constantly monitor and lobby such associations. When a plan materializes, Bull should organize on a project basis to serve it.

In the <u>Monetique</u> market, banks are already equiped with servers for ATMs and EFTPOS, or well served by network companies. Some banks, however, are choosing to leave network companies for their own network, hence needing a server architecture. This opportunity can be estimated at a maximum of 10 servers a year in France and 5 in Spain. Additionally, Bull should consider attacking the EFTPOS market in France where changes in regulation have created a replacement opportunity, and in Italy which is hardly equiped yet.

Currently <u>EDI</u> is not a big market in Europe (2,900 companies involved in EDI, 70% of which in the UK) compared to the US (15% of all firms). However EDI is growing quickly and has big long term potential (30% annual growth estimated in the next 6 years). A number of players, including banks, could drive this development in Europe. Banks are unlikely to proactively push the development of EDI in the short term. However, as change is perceived as unavoidable, some banks may invest in EDI to add value to their traditional transaction-based activities. Bull should therefore take advantage of its strengths (link with Telecom, know-how in interbanking networks, Allegro experience), to position itself as a credible vendor. Because EDI will not be specific to banking, opportunities should be pursued on a cross sectorial basis.

In <u>stand-alone applications</u>, the main opportunity is undoubtedly the application to banking of the new technologies of imaging and multimedia. Promoting these new technologies requires the adoption of a systems integration approach. In other vertical applications, such as trading rooms, France is mature; while in Italy and Spain, well established European competitors with references are likely to be the winners.

OVERALL STRATEGY AND ECONOMICS

The common thread to all segment strategies is systems integration. Bull does not have the sources of competitive advantage to succeed as broad-based leader, and other possible strategic roles such as leadership platform supplier, "hot-box" or niche player, or applications company do not appear to fit Bull (Ex 43). The role of systems integrator requires major changes from Bull's current role.

This strategy described below, if properly implemented, should be profitable but will only partially compensate the unavoidable erosion of GCOS8 revenues and profits.

Strategic direction

Bull should become a significant player (among the 3 top) in the banking market in the three major countries by developing broad based systems integration capability. Strong product knowledge as a hardware manufacturer, close relationships with customers and partners, a high expertise in banking processes, and project management skills will allow Bull to achieve this superior capability. Specifically:

- Promote an image of a full range supplier, but focus in the three countries on two key segments: central systems and branch systems. In addition pursue local opportunities based on each country's specific strengths, namely small banks in France and Italy (Ex 44).
- ¶ Provide superior systems integration services by selecting the best available technologies on the market and building value on industry standards to deliver first better and lower risk solutions (Ex 45).

Major changes required

Becoming a systems integrator requires a significant adaptation of Bull's current strategy and skills. We have summarized below the most critical areas of change (Ex 46).

- ¶ Share a common vision of Bull's strategy in the banking sector at the Groupe and country level. This involves adopting a Groupe approach in the development of solutions. Specifically, Bull should run joint projects between countries, primarily to leverage scarce resources, but also to ensure consistency of offer, and build on successes.
- Invest to develop solutions, add value to standards, and create and maintain a leadership in some technologies which may be of particular importance in banking (i.e. imaging, multimedia, expert systems). This will require to build strong alliances with selected partners (ISVs, VARs, OEMs, and others).
- ¶ Be first to incorporate latest technologies in solutions, based on both standard and non standard technologies. As a result, Bull should be ready to outsource when necessary, and participate and drive the process by which industry standards are defined.

¶ Go from product selling to consultative selling, i.e. understand banks' strategic priorities and ITS technical and application architecture, and develop relationships with top-management and key decision makers outside the EDP department. Once the sale is made, be excellent in project management and post sale services. To further support this effort, play an active role in the local banking community.

Overall economics

The proposed strategy will allow Bull to take advantage of the opportunities in the market, but will not prevent an overall erosion of revenues and margins. Based on broad assumptions, total revenues in the three countries are likely to decrease from \$499M in 1990 to \$463 in 1994, and contribution from \$156M to \$132M over the same period. Investments required to implement the strategy have been estimated to \$18 to 23M, but need to be confirmed (Ex 47).

MAKING IT HAPPEN

The success of the recommended strategy will largely depend upon implementation policies. Organizational changes are significant and require learning and practice. In this context, immediate segment specific projects, agreed in principle by the three countries, seem to be the best first steps towards initiating the change process. As Bull learns and has successes, the broad organizational changes outlined here can be refined and detailed, and will become easier to implement (Ex 48).

Organizational requirements

While existing institutional skills should be used to launch this effort, changes in the organization will be required. Changes in structure, systems and staff are needed to strengthen skills at Bull (Ex 49). Specifically:

- The execution of the strategy will require the development of systems integration skills which call for new roles: senior client relationship manager, project leader, organization consultant, technical consultant, and programmer. This implies a mix of outside recruiting and new intensive training programs (Ex 50).
- ¶ In addition to the changes reflected in the new roles, the structure should reflect the strategy with the creation of dedicated teams/business units to help focus the organization on each segment.
- The required changes in the systems elements of organization include the development of incentives and compensation schemes coherent with Bull's new role as systems integrator. It also calls for a number of supporting tools such as, skills and experience databases, consulting and project management methodologies, and customer and project profitability information.

Bull will need to evaluate a broad variety of partnerships which will be key to support the strategy (Ex 51).

Segment projects

Some elements of the strategy can be implemented and have an impact on results before a more integrated effort is rolled out. Moreover, such projects will help develop some of the systems and staff capabilites which will be required in the future. We suggest the immediate launch of three multi-country projects.

Central systems

In order to maintain the critical mass of GCOS8 revenues until Unix and DCM become a viable alternative, Bull should limit the perceived gap in value proposition with MVS's, and help GCOS8 users feel less isolated. Bull should therefore launch sequentially two multi country processes (Ex 52):

- The first one should select areas of investment on a customer by customer basis, exploiting commonalities as much as possible to limit the perceived gap in Bull's value proposition with MVS's, and leverage strengths to deliver a few, but highly perceivable, advantages to the installed base.
- The second one is to create a European Club with Bull's loyal banking customers to promote loyalty to and perceived value from Bull at top-management level. This would allow exposure of Bull's technological know-how to customers (including Unix and DCM), and creation of a forum where investments, which banks need to achieve their most pressing goals, could be proactively suggested and federated. The European nature of the club is necessary to reduce the feeling of isolation of users in Spain and Italy.

Branch systems

It is on branch systems that Bull will primarily implement its system integration strategy. The two goals of this project are first, to obtain a reference in each country on which to build credibility; second, to develop a state of the art offer.

Given Bull's traditional focus on proprietary and central solutions, addressing the branch systems segment based on standards and client server architectures will require a major cultural change and major investments. Bull needs to:

- ¶ Receive a clear go-ahead from management.
- ¶ Build a project team involving the three countries, to quickly agree on a common approach and on offer elements, find the necessary partners, and get a reference in each country (Ex 53).
- ¶ Strongly communicate Bull's offer and successes, internally to start the change process, and externally to create awareness and build a positive image.

Small banks

The goal of this project is to develop, with selected partners, the new small bank solution using as much as possible elements taken from currently existing solutions at Bull or outside. This effort requires the creation of a Franco-Italian taskforce (Ex 54).

While these three projects should be launched immediately, the conclusions of this study should be shared with the other European countries in order to determine, in each case, the applicability of the recommendations to the local environment. Should there be an opportunity, some of these countries could be involved in the projected efforts (Ex 55)

* * *

In summary, we believe that a system integration approach dedicated to banking can succeed and generate attractive returns on investment. It will not replace, however, the level of revenues and margins generated by proprietary mainframes, at least in the short term. But to be successful, the effort cannot be undertaken without changes in the current organization, and investments, specially to secure alliances.