



**Poseidon House
Castle Park
Cambridge CB3 0RD
United Kingdom**

TELEPHONE:
INTERNATIONAL:
FAX:
E-MAIL:

**Cambridge (01223) 515010
+44 1223 515010
+44 1223 359779
apm@ansa.co.uk**

APM

Checklist for sponsor progress

Rob van der Linden

Abstract

To help us finalise the 1995-1998 ANSA Workplan it is necessary to solicit inputs from the companies sponsoring ANSA.

This document contains the checklist for questions to be asked during interviews to be held in October and November of 1995.

APM.1609.00.04

Draft

20th August 1996

Project Management (confidential to APM)

Distribution:

Supersedes:

Superseded by:

CHECKLIST FOR SPONSOR PROGRESS

MAIN TECHNICAL CHALLENGES

What are the six most important technical issues to your company in the field of distributed systems and with a product horizon of three to five (or maybe more) years from now?

For example:

- security
 - end-to-end security for applications rather than systems
- real time
 - adjustable end-to-end quality of service
 - high performance (e.g. for telecommunications services)
- federation of systems
 - CORBA and OLE distributed computing technology converge for electronic commerce
 - business process driven distributed information processing
- networks of networks
 - distributed control of broadband multi-media networks
- infrastructure at the language/operating system level
 - syntax independent programming
- multi-media
 - active content paradigm for electronic information

What is the single additional thing that you wish ANSA would address in addition to the existing workprogramme?

WORKPROGRAMME

How do you think the effort should be split (in%) between the two major technical workprogramme topics?

What percentage of overall effort should we apply to “technology transfer”?

How many consulting days do you think you will need next year and on what topics? (Reviews of projects, training, design help, joint working).

What fee level do you think is appropriate for 1996?

Do you have any views on the differing rates for different sponsor classes?

How do you think we can encourage visitors and secondees again?

DELIVERABLES

What requirements might you have on the format of the deliverables:

- design methodology applied
- documentation tools used (FrameMaker, Word)
- document formats supported (postscript, html, MIF, RTF, text)
- programming languages used (C, C++, ADA)
- software control and build environment?

- platforms, operating systems

What code would you require from each of the workpackages

- examples
- prototypes
- integrated release

To what quality level should code adhere?

What documentation levels are expected?

What can be done to improve the review process for deliverables?

INTERFACE

We plan to identify one APM/ANSA person to be your “mole” in APM. Any preferences on who?

We would like to plan and document the interface better. As part of that we would like to agree an action plan at least once every six months.

Who in your company could be identified as the main interface to coordinate such an action plan?

Are there any workshops that you would you like us to arrange?

OPERATIONS

Anything we can do to improve our administration, invoicing etc.?

Does the counting of consultancy days satisfy you?

What is your opinion on the TC and MC meetings?

BUSINESS CASE

How do we develop a list of the benefits you get from the ANSA Workprogramme for your company?

Can we complete the list and prioritise the items today? If not, what process can we set up to achieve a prioritised list?

What are the five key benefits that you get from us?

Diary

0.1 BNR

Date: 16 October 1995

Present: Alistair Hyndman, Harold Toze, Dave Olliver, Tim Roberts
Andrew Herbert, Mike Eyre

0.2 BT

Date: 11 October 1995

Present: Steve Rudkin, Bob Briscoe, Steve Condie
Andrew Herbert, Rob van der Linden

0.3 DRA

Date: 12 October 1995

Present: John Holmes +?
Andrew Herbert, Mike Eyre

0.4 Eurocontrol

Date: 16 October 1995

Present: Ben Bakker, Eike Meyenberg, Gert Lauter, Michelle Khavari
Rob van der Linden

0.5 France Telecom

Date: 27 October 1995

Present: Jean-Bernard Stefani
Andrew Herbert, Rob van der Linden

0.6 GPT

Date: 27 November 1995

Present: Howard Green, Neil Mason, Ian Davies, John Evans
Mike Eyre, Rob van der Linden

0.7 HP

Date: 17 October 1995

Present: Ray Crispin,
Andrew Herbert, Mike Eyre

0.8 ICL

First meeting:

Date: 30 October 1995

Present: Graham Hook, Ian Cordon

Andrew Herbert, Mike Eyre, Rob van der Linden

Second meeting:

Date: 15 November 1995

Present: Ian Cordon

Rob van der Linden

0.9 Telefonica I&D

Date: 24 October 1995

Present: Juan Carlos Moreno, Javier Carrasco

Rob van der Linden

1 BNR

Note: The notes in this section are taken from a one sheet summary by ajh. Not all questions are therefore covered.

The meeting was characterised by several clear disagreements amongst the BNR staff present, without their manager intervening.

Overall impression was that BNR have difficulties defining their objectives, making it hard for a business case for sponsorship to emerge.

MAIN TECHNICAL CHALLENGES

What are the six most important technical issues to your company in the field of distributed systems and with a product horizon of three to five (or maybe more) years from now?

What is the single additional thing that you wish ANSA would address in addition to the existing workprogramme?

No firm opinion emerged. There was some desire for ANSA to return to its roots, i.e. standards, harvesting research and “the next question”.

WORKPROGRAMME

How do you think the effort should be split (in%) between the two major technical workprogramme topics?

No firm opinion. The ISF work was seen as tactical and its direction unclear. AJH explained the way forward to agents and metadata. Not clear if this was desirable from BNR's viewpoint or not. The DIMMA work was too detailed and too much code. “It goes over ground covered by BNR last year”. However, Tim Roberts said it would be useful to visit these topics.

What percentage of overall effort should we apply to “technology transfer”?

Technology transfer includes standards effort. Dave Olliver thought DIMMA results should be used in helping OMG define streams and extend its CORBA (via telsig), but Tim Roberts thought there was “no chance” as OMG does not have any of this on its agenda.

How many consulting days do you think you will need next year and on what topics? (Reviews of projects, training, design help, joint working).

What fee level do you think is appropriate for 1996?

Do you have any views on the differing rates for different sponsor classes?

How do you think we can encourage visitors and secondees again?

The fee structure prohibits secondees.

DELIVERABLES

What requirements might you have on the format of the deliverables:

- design methodology applied
- documentation tools used (FrameMaker, Word)
- document formats supported (postscript, html, MIF, RTF, text)
- programming languages used (C, C++, ADA)
- software control and build environment?
- platforms, operating systems

What code would you require from each of the workpackages

- examples
- prototypes
- integrated release

To what quality level should code adhere?

What documentation levels are expected?

What can be done to improve the review process for deliverables?

INTERFACE

We plan to identify one APM/ANSA person to be your “mole” in APM. Any preferences on who?

We would like to plan and document the interface better. As part of that we would like to agree an action plan at least once every six months.

Who in your company could be identified as the main interface to coordinate such an action plan?

Are there any workshops that you would you like us to arrange?

OPERATIONS

Anything we can do to improve our administration, invoicing etc.?

Does the counting of consultancy days satisfy you?

What is your opinion on the TC and MC meetings?

BUSINESS CASE

How do we develop a list of the benefits you get from the ANSA Workprogramme for your company?

Can we complete the list and prioritise the items today? If not, what process can we set up to achieve a prioritised list?

What are the five key benefits that you get from us?

BNR found it hard to define the business case. Disagreements between BNR staff showed in the meeting.

RHKJC work is clearly seen as an important spin-off from the programme.

*BNR is eager to learn more about Object Lab; they are not opposed to it.
BNR is worried about IPR leaks into Alcatel via ReTINA.*

1 BT

Overall we had a very constructive meeting.

BT's main concern is the balance of the workprogramme being too far tilted towards DIMMA. The workplan appears to fit their internal developments rather well. Many small points for improvement and adjustment were identified.

MAIN TECHNICAL CHALLENGES

What are the six most important technical issues to your company in the field of distributed systems and with a product horizon of three to five (or maybe more) years from now?

***Federation**, specially as seen from a business perspective. BT expects to be active in the electronic shopping mall arena but will not be the first player. Consequently they will need to be able to work with everyone else*

***Security**, specially as it concerns federation between security domains.*

***Payment**, as related to electronic commerce, and security*

***Navigation**, the metadata work we did is interesting to BT.*

Real time infrastructure with Web based multi-media will be important.

What is the single additional thing that you wish ANSA would address in addition to the existing workprogramme?

Federation and security

WORKPROGRAMME

How do you think the effort should be split (in%) between the two major technical workprogramme topics?

50-50

What percentage of overall effort should we apply to "technology transfer"?

the current 30% is about right.

***Standards**: BT believe that IETF, OMG and W3C are the right targets, ISO etc have had their day. BT see ANSA play an important role in helping to set up working groups in these fora.*

TINA: the interface between Steve Rudkin's group and TINA is being taken over by the COMBAT project which is often not following TINA "standards". COMBAT is about advanced Service Control. Senior support for TINA is still in place.

***Evaluation**: we received a message after the meeting stating that the evaluation work we did on CORBA products was extremely valuable and should not be lost.*

How many consulting days do you think you will need next year and on what topics? (Reviews of projects, training, design help, joint working).

The pre-paid consulting days are seen as very useful as they allow a company to engage us without extra administrative or contractual overheads. The number of days is an issue of unclarity. It seems that there are sufficient days.

What fee level do you think is appropriate for 1996?

Current fee level is acceptable and perceived as good value for money

Do you have any views on the differing rates for different sponsor classes?

BT is clearly unhappy about the difference between system integrators, vendors, and end-users. They were unprepared for the question. Without saying it they seemed to question Bellcore's fee reduction.

How do you think we can encourage visitors and secondees again?

BT have had a head count freeze. This may change in the next year or so. The relationship between fee structure and secondees had not occurred to them.

0.0.1 Other points raised

The DIMMA work should be focussed better, perhaps with a real application. We talked about this and the demonstration workpackage BT has in the ReTINA project. We agreed the APM would target the DIMMA work at helping support BT's demonstrator in ReTINA. The issue of what the ReTINA TORB will look like (and how close to DIMMA it may end up) was discussed.

DIMMA needs to also look at RSVP and other Internet protocols for real time.

AST/IDL and stubcompiler work is NOT the primary interest of those at BT we talked to. They recognized these are important productivity improving techniques. They would buy this technology from software vendors and not develop it themselves.

DELIVERABLES

What requirements might you have on the format of the deliverables:

- design methodology applied

Steve's group have no tools, prescribed methodologies, version control systems or anything of that sort. They have few preferences.

- documentation tools used (FrameMaker, Word)

Word 6 is the standard across BT

- document formats supported (postscript, html, MIF, RTF, text)

The delivery of documents in gzip and postscript is unsuitable for PC and Mac users. BT would welcome directly browsable html, text, rtf etc in addition to what we carry right now.

- programming languages used (C, C++, ADA)

happy with C/C++, unhappy with demands for ADA from other sponsors

- software control and build environment?

no preferences. It is recognised that the ANSAweb deliverables will be used by BT and that a suitable format will need to be agreed.

- platforms, operating systems

BT is moving to Solaris, but alpha + OSF/1 will remain the major platform for RT work (Steve Condie's group)

What code would you require from each of the workpackages

- examples
- prototypes
- integrated release

To what quality level should code adhere?

What documentation levels are expected?

ANSAweb will be used by BT and they would like that to be as close to product as possible. DIMMA is much more experimental in their view.

What can be done to improve the review process for deliverables?

Early announcement of readiness of deliverables would help most. It is recognised that BT staff needs to be made available to perform the reviews.

INTERFACE

We plan to identify one APM/ANSA person to be your “mole” in APM. Any preferences on who?

no specific opinion

We would like to plan and document the interface better. As part of that we would like to agree an action plan at least once every six months.

This was received well. It was recognised that it requires a commitment at BT as well as at APM.

Who in your company could be identified as the main interface to coordinate such an action plan?

As a starting point it would be Steve Rudkin.

Are there any workshops that you would you like us to arrange?

We were requested to organise specific workshops at BT for BT staff. Perhaps running TC presentations or in-depth design workshops on both DIMMA and ISF.

We will also be invited to give talks at BT internal events, where we do not have to prepare the whole day but maybe have one or two presentations together with others. This will help us learn about BT's activities and priorities too.

Other points raised

*The **training programme** has helped a lot in spreading the word. Over 200 people were trained so far, a lot from the London Systems Engineering Centre (LSEC). Bob Briscoe is trying to collate a list of all those who attended so these people can be kept up to date on ANSA developments.*

***Ian Marshal:** has gone negative regarding ANSA following the federation deliverable which he sees as too abstract. The prototype part of the work was well received but there is clear disappointment of ANSA not having followed through the business model side of federation. Andrew Herbert should seek contact in the first half of 1996 to turn the tide. Patrick Farly and Martin Chapman are in Ian's group and there are some politics between Steve's and Ian's group too it seems.*

***Steve Proctor:** is doing an MSc and also in a more development oriented area now (operational support systems, interest in security issues and a big push on databases). His area has been a customer of the training courses APM have provided. We agreed that this interface remains in the training area.*

OPERATIONS

Anything we can do to improve our administration, invoicing etc.?

there are no complaints in this area.

Does the counting of consultancy days satisfy you?

BT is happy for us to count and tell them every quarter by means of the TC/MC progress report.

What is your opinion on the TC and MC meetings?

There appear to be too many MC's. One or two a year would be enough. TC's should carry a significant workshop content or be slimmed down and replaced by more visits of technical staff giving progress and design presentations (see interface above).

BUSINESS CASE

How do we develop a list of the benefits you get from the ANSA Workprogramme for your company?

Can we complete the list and prioritise the items today? If not, what process can we set up to achieve a prioritised list?

What are the five key benefits that you get from us?

We were given a copy of the slides for a presentation on how ANSA relates to BT's current activities and whether it is seen as value for money. We are given an overall "well worth the investment". The presentation contains a number of pointers to the business case for BT.

Actions

The list of agreed actions:

- *student secondee possible shortly after Christmas*
- *ANSA presentations at BT events to be planned (by BT)*
- *In depth workshops to be organised (first one early November on DIMMA)*
- *document publication to sponsors needs different formats (html)*
- *ANSAweb release and handover needs agreement on the formats*
- *APM to cooperate on the ReTINA demonstrator over DIMMA*
- *More interactive TC's*
- *AJH to approach Ian Marshal after code deliverables DIMMA & ANSAweb*

1 DRA

the notes Andrew took are attached to this chapter. They need weaving into the questions.

MAIN TECHNICAL CHALLENGES

What are the six most important technical issues to your company in the field of distributed systems and with a product horizon of three to five (or maybe more) years from now?

What is the single additional thing that you wish ANSA would address in addition to the existing workprogramme?

WORKPROGRAMME

How do you think the effort should be split (in%) between the two major technical workprogramme topics?

What percentage of overall effort should we apply to “technology transfer”?

How many consulting days do you think you will need next year and on what topics? (Reviews of projects, training, design help, joint working).

What fee level do you think is appropriate for 1996?

Do you have any views on the differing rates for different sponsor classes?

How do you think we can encourage visitors and secondees again?

DELIVERABLES

What requirements might you have on the format of the deliverables:

- design methodology applied
- documentation tools used (FrameMaker, Word)
- document formats supported (postscript, html, MIF, RTF, text)
- programming languages used (C, C++, ADA)
- software control and build environment?
- platforms, operating systems

What code would you require from each of the workpackages

- examples
- prototypes
- integrated release

To what quality level should code adhere?

What documentation levels are expected?

What can be done to improve the review process for deliverables?

INTERFACE

We plan to identify one APM/ANSA person to be your “mole” in APM. Any preferences on who?

We would like to plan and document the interface better. As part of that we would like to agree an action plan at least once every six months.

Who in your company could be identified as the main interface to coordinate such an action plan?

Are there any workshops that you would you like us to arrange?

OPERATIONS

Anything we can do to improve our administration, invoicing etc.?

Does the counting of consultancy days satisfy you?

What is your opinion on the TC and MC meetings?

BUSINESS CASE

How do we develop a list of the benefits you get from the ANSA Workprogramme for your company?

Can we complete the list and prioritise the items today? If not, what process can we set up to achieve a prioritised list?

What are the five key benefits that you get from us?

Andrew's notes from the meeting

- SEC members have come from outside ED with Fervante etc.

JEH - MOD needs to learn about approaching large scale problems incrementally.

Fort Halstead

- *Research program into IT stds.*
- *Customer for Army tactical*
- *Concerned that stds. will meet military needs*
- *Focus at present*
 - *Msging, X.400, X.500, EDI*
 - *System mgt. of e.g. X400 make contact here*

Watching brief on emerging areas and insertion of priorities

- *ODP & 00 stuff is important here*
- *DME - “we are active in stds.”*
- *“COBRA comparisons”*

JEH

- *QoS dimension is important*

- *Need to push end-to-end aspect*
- *Synthetic theatre of war - VR Wargaming*
- *SHAPE Tech.Centre project*
 - *ATM nets, multi-media, security*
 - *Military broadband Internet*
 - *talk to W.Jame next week*

P

- *ATC*
- *Enterprise modelling with Euro Control*
- *Want to grow this*
- *Other people more technology = client/server distributed simulation*

- *Need to know more about ANSA (Nigel Williams)*
- *# safety = 3D> use old fashioned technologies*
- *Timeframes 2015/2020*
- *Set up a workshop for ATC people*

JEH

- *Internet freaks - save contact*

JEH

- *SATCOM*
 - *what are the best uses of it?*
 - *aircraft limited up/down links*
- *univ. pages are useful advertising*
- *Scientific Advisers :-*
 - *Dr Alan Grant (replacing Brian Taylor): Keen on workshop/ODP; see him next Wednesday*
 - *Dr Amjad Farooq: Keen on ODP; Spending \$nM on DRA*

JEH

- *Advertise in DRA corporate "paper" DRA news (ACTION) (high profile sponsors) (key projects)*
- *Fees: Stay at current level*

1 Eurocontrol

Overall this meeting was very constructive.

Eurocontrol's main objective in taking part in the ANSA activities is strategic:

- *encourage an OPEN air traffic control architecture*

Eurocontrol encourages industry to standardise but does not like to prescribe the standards. They aim at COTS solutions which allow member states to cooperate/federate in the future.

Consequently, Eurocontrol is less concerned about the precise details of the workprogramme and much more in the effect of our actions in industry and standards. They would like to see ATC suppliers and member states take note of ANSA and ODP (standards). There is evidence that we are influencing companies like Thomson CSF and DEC and country CAA's (e.g. DFS) already.

Eurocontrol joined originally for 1 year and are aware of the 6 months notice period. They are going through a process of re-appraisal and this meeting helped formulate the business case for them.

MAIN TECHNICAL CHALLENGES

What are the six most important technical issues to your company in the field of distributed systems and with a product horizon of three to five (or maybe more) years from now?

What is the single additional thing that you wish ANSA would address in addition to the existing workprogramme?

The main technical and political challenge is to create an OPEN architecture for ATC. One of the main issues is how to agree a framework for system development and deployment which will allow:

- *increased functionality for ATC*
- *preservation of authority over sub-systems*
- *controlled cooperation between systems*
- *new technologies to be supplied by traditional ATC supplier companies*

*There is a strong interest in **dependability** as well as **real time**. The ATC industry is technically conservative as it requires proof of the dependability of new technologies.*

It is generally difficult to develop a list of technical challenges since the backgrounds of those involved is very varied.

WORKPROGRAMME

How do you think the effort should be split (in%) between the two major technical workprogramme topics?

The precise division between the two is unimportant. Eurocontrol agree that B tasks (DIMMA, specially real time) is more important than the C tasks.

What percentage of overall effort should we apply to “technology transfer”?

The A tasks, and specially standards, require more effort. The current 25% is too small. It is recognised that a stock of results from B and C workpackages is needed to back up any standards activities.

How many consulting days do you think you will need next year and on what topics? (Reviews of projects, training, design help, joint working).

It was hard to get a precise answer to this one as it depends on the kinds of things which are happening at Eurocontrol. The days have been successfully used for project review and awareness. In the near future they will be used for follow up sessions after the courses (as we did for BT).

What fee level do you think is appropriate for 1996?

The current fee level is sustainable. Any significant increase will require specific justification to the funding body inside Eurocontrol. Predictions are that such justification will be hard to produce given the high level strategic interest (with intangible results).

Do you have any views on the differing rates for different sponsor classes?

Eurocontrol sees the differential rates as justified on the grounds that they will not use the technology. Vendors and system integrators seek to make a profit with the results of the programme.

How do you think we can encourage visitors and secondees again?

no opinion.

DELIVERABLES

What requirements might you have on the format of the deliverables:

- design methodology applied

Since the detailed results are of no immediate use this issue is not relevant.

- documentation tools used (FrameMaker, Word)

Better access for PC and Mac users would be welcome.

- document formats supported (postscript, html, MIF, RTF, text)

Eurocontrol would like to host their own site which could serve our documents to Eurocontrol staff over their Lotus Notes network. This needs further investigation.

- programming languages used (C, C++, ADA)

Since the detailed results are of no immediate use this issue is not relevant.

- software control and build environment?

Since the detailed results are of no immediate use this issue is not relevant.

- platforms, operating systems

What code would you require from each of the workpackages

- examples
- prototypes
- integrated release

To what quality level should code adhere?

What documentation levels are expected?

Since the detailed results are of no immediate use this issue is not relevant.

What can be done to improve the review process for deliverables?

Eurocontrol do not see any need at this stage to participate in detailed reviews. However, as other parts of the organisation become interested this may change.

INTERFACE

We plan to identify one APM/ANSA person to be your “mole” in APM. Any preferences on who?

No preference. The current interface is clear: RvdL for general issues, CMM for training related issues, JAB for the PED project.

We would like to plan and document the interface better. As part of that we would like to agree an action plan at least once every six months.

This idea is welcomed very much.

Who in your company could be identified as the main interface to coordinate such an action plan?

Reorganisation is making this hard right now.

Eike Meyenberg remains MC rep until end 1995 when he moves to COMMS. Informally ANSA sponsorship may remain with him.

Ben Bakker remains TC rep for now, but moved to DED1.

Gert Lauter is likely to take on the MC role if ANSA sponsorship remains in DED2.

Are there any workshops that you would you like us to arrange?

Eurocontrol welcomes workshops and intends to attend these but has no firm view on subjects right now.

OPERATIONS

Anything we can do to improve our administration, invoicing etc.?

No problems.

Does the counting of consultancy days satisfy you?

No problems.

What is your opinion on the TC and MC meetings?

There are too many. One or two MC meetings would suffice (Eurocontrol would not attend more). TC meetings in workshop format are preferred over normal meetings. This would also give Eurocontrol the opportunity to send different staff to different workshops/ meetings.

BUSINESS CASE

How do we develop a list of the benefits you get from the ANSA Workprogramme for your company?

Can we complete the list and prioritise the items today? If not, what process can we set up to achieve a prioritised list?

What are the five key benefits that you get from us?

A list of benefits was developed in the meeting:

First point is the extent to which ANSA can influence standards. The extent is more important than the direction right now.

Second is awareness. Our training courses will generate awareness inside Eurocontrol. The follow up awareness consultancy day will hopefully generate a lot of enquiries from national CAA's as well as industry. The more of these and the better we follow them up, the better our business case will be for 1996 funding.

Third, and related issue is: "does Eurocontrol's ANSA sponsorship help give a signal to the ATC industry to take note of ODP technologies?" This was discussed and the merits for and against examined. For the time being the "merits-for" have it.

Fourth (related) point is the enquiries we have had from DFS and the effect of the GAAS review we did on Thomson CSF. It is obviously important that we let Eurocontrol know how we follow these enquiries up (AJF?).

Access to consultancy days is almost accidental, but useful in justifying sponsorship to those who require more concrete benefits and justification.

Actions

Dissemination: We should help Eurocontrol put our documents over their Lotus Notes network.

Dissemination: can Eurocontrol distribute documents on CD to member states?

1 GPT

MAIN TECHNICAL CHALLENGES

What are the six most important technical issues to your company in the field of distributed systems and with a product horizon of three to five (or maybe more) years from now?

What is the single additional thing that you wish ANSA would address in addition to the existing workprogramme?

GPT relates to ANSA in three roles: (1) as public switch provider, (2) as SDH transmission vendor, and (3) as provider of advanced business communication modules.

*As **public switch provider** it is involved in **the medium term** in: (a) deploying CORBA technology and (b) adding distribution capabilities to tools which support the design process. In both these, reduction of time to market and scalability are the most important concerns. APM is satisfying a need for support in this area by specific consultancy outside the Phase 3 contract. This is likely to continue for the next 12-18 months. Relevant work is covered by GPT Coventry (Howard Green, Neil Mason etc.)*

*Still as public switch provider, but in **the longer term**, GPT is concerned with*

1. *the future of the "telecomms mainframe". Direct client/server systems are replacing central network intelligence. The intelligence is moving to the edges of the network. The edges are also becoming ever more reconfigurable. The network with 20 million or so configurable terminals IS a distributed computing system.*
2. *the meaning of federation amongst intelligent networks is largely unknown or unexplored.*
3. *many issues of tariffing and charging are open. Who charges what and one whose behalf? The relationship between charging structures and usage patterns was briefly discussed.*
4. *security: end-to-end security which secures content of messages is easier than controlling the (mis)use of information about resource or service usage. The control of use of such information is a major issue (regulation and security are the main regulators, both need enforcing)*
5. *multimedia streams themselves are not a problem. How to manage them IS seen as an issue. We are reminded that DAVIC is working on multimedia streams too and that the Web and Internet should not be seen as the only source of inspiration here. DAVIC has the notion of a session to which resources are attached. The resources can be detached and the session passed round to someplace else, where resources can once more be attached. This differs from reference passing paradigms.*

Other ideas:

nightmare scenario is the emergence of the Internet as a reliable message passing facility with connection oriented capability. A small charge of say 1p/message could render many traditionally provided telecommunications services obsolete (too expensive)

Jean Bernard Stefani's idea of a multi-party transaction which would only fire if a distributed condition was fulfilled was seen as an example of an interesting area for future research (this did remain rather vague though).

As SDH transmission vendor, GPT does not relate to ANSA very well. Its hardware sales are very profitable but software development costs swallow the profits. ATM is not really taking off as much as was perhaps hoped or anticipated.

As provider of advanced business communication modules GPT has a very strong interest in the results of the DIMMA work. Real time and multimedia are very important here. Technology transfer must be improved in this area. Relevant work is done in Coventry (Tim Moore).

WORKPROGRAMME

How do you think the effort should be split (in%) between the two major technical workprogramme topics?

A precise percentage did not emerge. The interviewers guess was 70% to DIMMA and 30% to the Internet/Web but taking account of developments like DAVIC.

DIMMA work is of interest. DIMMA/Web combination is NOT relevant.

What percentage of overall effort should we apply to "technology transfer"?

See below. Our work is starting to concentrate more on individual sponsor needs and the core activities are becoming less important.

How many consulting days do you think you will need next year and on what topics? (Reviews of projects, training, design help, joint working).

On balance, pre-paid consultancy was seen as an advantage. This is tied up with the general business model for the consortium.

What fee level do you think is appropriate for 1996?

Current levels are ok for 1996.

Howard believes that the fees ought to reflect the fact that our work is starting to concentrate more on individual sponsor needs and that the core activities are becoming less important. He therefore wants to pay for sponsor specific consultancy as he is doing now for the Kennedy-Carter project and the consultancy AJH is doing right now. This will continue for the next 12-18 months. AJH, DJO and CMM are seen as desirable consultants for these projects.

Do you have any views on the differing rates for different sponsor classes?

None was expressed.

How do you think we can encourage visitors and secondees again?

Instead of visitors, GPT believe that a certain amount of sponsor-specific development can be put in place. GPT would not have too many problems with making some of its code available to other consortium members.

DELIVERABLES

A general point was that of delivery could be improved.

What requirements might you have on the format of the deliverables:

- design methodology applied

none

- documentation tools used (FrameMaker, Word)

Word 6, (also some FrameMaker 3)

- document formats supported (postscript, html, MIF, RTF, text)

postscript is acceptable.

- programming languages used (C, C++, ADA)

C and C++

- software control and build environment?

The easiest is a tree with a makefile in the root, which will build the distribution. Most of GPTs environment is set up to use make. GPT is starting to use ClearCase in some situations.

- platforms, operating systems

UNIXware, OS/2, Solaris, LynxOS, Windows, SUNOS. No Windows/NT (although this would be desirable!)

What code would you require from each of the workpackages

- examples
- prototypes
- integrated release

Early prototypes are appreciated even if they do not fully work. Much can be learned from early code.

To what quality level should code adhere?

Prototypes should deal with the most common failure modes and be working (reasonably robust). Prototypes should not be too robust because this makes them too specific and this then does not allow GPT to change them easily to fit their own particular requirements.

Neil Mason remarked that GPT could make much more use of ANSA output if it had a viable platform to run it on.

What documentation levels are expected?

documentation can be commensurate the maturity of the software. It must be present though.

What can be done to improve the review process for deliverables?

Give at least ONE month notice for reviews of documents.

INTERFACE

We plan to identify one APM/ANSA person to be your “mole” in APM. Any preferences on who?

DJO, CMM, AJH have proven to be very good contact persons for the transfer of detailed technical knowledge. CMM's courses have been very useful and so is the current work with Kennedy-Carter.

We would like to plan and document the interface better. As part of that we would like to agree an action plan at least once every six months.

Who in your company could be identified as the main interface to coordinate such an action plan?

Howard Green and Neil Mason at Coventry. Contact should also be sought with Tim Moore at Maidenhead.

Are there any workshops that you would you like us to arrange?

The value of workshops was recognised. No specific topics were identified.

OPERATIONS

Anything we can do to improve our administration, invoicing etc.?

This seems to run smoothly.

Does the counting of consultancy days satisfy you?

This should be placed on a more formal footing and tracking should be better. It was agreed that pre-paid consultancy days were valuable.

What is your opinion on the TC and MC meetings?

There may be too many of these. Visits by team members to GPT sites would be welcomed and could substitute up to two TC's. Combined TC/MC meetings would also be a good idea because this will increase the opportunity for MC members to learn about technical progress.

These meetings are also valuable as a forum for meeting representatives from other companies (BT, CNET, Bellcore). Workshops could fulfill this need too.

BUSINESS CASE

How do we develop a list of the benefits you get from the ANSA Workprogramme for your company?

Can we complete the list and prioritise the items today? If not, what process can we set up to achieve a prioritised list?

What are the five key benefits that you get from us?

GPT have already prepared a list of benefits and used these to secure the 1996 budget. There is no need to further develop these at this stage.

Other issues

ReTINA: GPT would like to be kept informed of progress here.

1 France Telecom

France Telecom originally joined the ANSA consortium to get the benefits from **consolidation of research**: The work ANSA have done in this area is very helpful to a systems integrator such as France telecom, because although our reports are harder to read they do give a systems picture which cannot be discerned from standards documents.

proof of concept prototyping: This enforces the first item and demonstrates systems integration. ANSAware was useful as a learning vehicle and as a reference implementation used when making comments on procurement decisions in France Telecom.

Both of these are still very important, although it is recognised that a lot of the low level distributed systems research is now done.

Increasingly therefore France telecom sees APM as a partner in international projects. ReTINA is the first of these. A second project is emerging in the area of service brokerage.

The 1996 budget for ANSA is approved. For 1997 a different funding model for CNET will apply and this will have an impact on ANSA funding too. The extend of the change is unknown for now.

MAIN TECHNICAL CHALLENGES

What are the six most important technical issues to your company in the field of distributed systems and with a product horizon of three to five (or maybe more) years from now?

In the **short term** service brokerage is important to France Telecom. They already provide such a service as intermediaries between a large number of service providers and consumers. Consumers see a consistent interface to many services and deal with FT for all billing, security and notary functions. Current projects ignore distributed systems technologies, but this should change with a new ACTS project. (AJH explained the problems of part funded projects for APM). For this project ISF results are immediately significant. DIMMA is less relevant as it does not reach the "edges" of the network.

jean-bernard agrees that DIMMA is the way things ought to go, but agreed that commercially there is a significant risk. However, DIMMA should develop to a minimal ORB with exposed internals to allow plug & play.

In the **long term**, jean-Bernard sees security as a major issue in the 2-3 year horizon. Specially the big picture as sketched in our ARs. The second issue he sees dependability which is a large and complicated area in which one cannot hope to produce more than a set of guidelines which can be used by those building systems. (Existing methodologies say almost nothing in this area.)

In the **time frame beyond 3 years** Jean-Bernard sees a need to work on ways to control activity in distributed systems. Transactions are one way of doing it but current systems go about this in the wrong way. Active agents with or without intelligence in a heterogenous environment are the future in this area. The impact of reflective systems is also of interest.

What is the single additional thing that you wish ANSA would address in addition to the existing workprogramme?

Security and dependability.

WORKPROGRAMME

How do you think the effort should be split (in%) between the two major technical workprogramme topics?

50 - 50

What percentage of overall effort should we apply to "technology transfer"?

25-30% is too much.

How many consulting days do you think you will need next year and on what topics? (Reviews of projects, training, design help, joint working).

Due to language problems CNET have not used their consulting days. This is unlikely to change.

What fee level do you think is appropriate for 1996?

Current fee is ok. There will be severe budget limitations as a result of reorganisation in the way in which CNET gets funded. (Currently from corporate funds, in the future from operating companies.) The fee of some FF800K is now too large. It will be easier if it was made up of several smaller sums. In 1997 there will be less priority on research.

Do you have any views on the differing rates for different sponsor classes?

How do you think we can encourage visitors and secondees again?

The language issue is most important, together with the difficulty of finding someone who wants to move to the UK.

A general point here is that ANSA is not seen as strategic by CNET management. TINA is seen that way because all competitors and telcos are there too.

DELIVERABLES

A general point was that there should be a reference manual every 1 - 1.5 years so that all material is drawn together and the relationships between and the relative importance of currently separate ARs and TRs can be communicated.

What requirements might you have on the format of the deliverables:

- design methodology applied
- documentation tools used (FrameMaker, Word)
- document formats supported (postscript, html, MIF, RTF, text)

Frame is used widely., Postscript access is fine. Documents are served from a mirror site at CNET already (postscript only).

- programming languages used (C, C++, ADA)

C++ is widely hated but used

- software control and build environment?

There is no requirement as JBSs group does not use any such system.

- platforms, operating systems

SUN Solaris 2.4, MacOS and PC based.

What code would you require from each of the workpackages

- examples
- prototypes
- integrated release

Integrated releases are best, specially for passing on to other groups.

Early releases are helpful in obtaining early appreciation of the direction and for experimentation.

To what quality level should code adhere?

What documentation levels are expected?

Current levels meet the need.

What can be done to improve the review process for deliverables?

JBS saidd that the review of deliverables by CNET had been patchy because it was not easy to find effort to do a proper job. He blames his own scheduling of work.

INTERFACE

We plan to identify one APM/ANSA person to be your “mole” in APM. Any preferences on who?

We would like to plan and document the interface better. As part of that we would like to agree an action plan at least once every six months.

An action plan would help.

Who in your company could be identified as the main interface to coordinate such an action plan?

JBS in the first instance

Are there any workshops that you would you like us to arrange?

These would have to be in the context of ongoing projects at CNET. JBS needs further thinking about what and when.

OPERATIONS

Anything we can do to improve our administration, invoicing etc.?

No problems as this happens once a year.

Does the counting of consultancy days satisfy you?

See earlier.

What is your opinion on the TC and MC meetings?

TC meetings are always/usually attended. MC meeting hardly ever. Combining them is favoured. Say a half day MC, followed by 1.5 days TC.

BUSINESS CASE

How do we develop a list of the benefits you get from the ANSA Workprogramme for your company?

Can we complete the list and prioritise the items today? If not, what process can we set up to achieve a prioritised list?

What are the five key benefits that you get from us?

Key benefits are

- *consolidation of research*
- *proof of concepts*
- *involvement in projects (e.g. ReTINA)*
- *ANSA results are used as a basis for internal consultancy in CNET.*

The future business benefits will have to fit in with those perceived by the operating companies who will sponsor CNET and thereby ANSA. Jean-Bernard is unsure exactly what these benefits will be as the reorganisation of CNET has not yet taken place.

1 HP

Note: The notes in this section are taken from a one sheet summary by ajh. Not all questions are therefore covered.

HP does not oppose the workprogramme per se. It seemed however that the topics do not fit their (Crispen') charter. Involvement in ANSA requires a return on management investment. Since there is no other obvious stakeholder, the funding appears to be under severe threat.

APM is seen as having stopped the main technology transfer channel: the secondee. Changing the fee structure to encourage them again did make no impact.

There is an opportunity to sell a fresh technical plan within a three month timeframe. HP does not want to damage the consortium but would pull out if this was unsuccessful.

There was a suggestion that the consortium format gets in the way of doing things.

MAIN TECHNICAL CHALLENGES

What are the six most important technical issues to your company in the field of distributed systems and with a product horizon of three to five (or maybe more) years from now?

What is the single additional thing that you wish ANSA would address in addition to the existing workprogramme?

There was a hints in this area only: Web and E2S related tasks would fit a new "Electronic Enterprise" initiative at HP (NJE running this?).

Another hint (more vague) was that DIMMA might interest the Internet people if it included RSVP etc.

A separate discussion with Joe Sventek revealed that:

- *ANSA output must be based on CORBA or better still ORBlite*
- *Multi-media is not high on HP's agenda*
- *High integrity CORBA (dependable, secure) might be of interest*

WORKPROGRAMME

How do you think the effort should be split (in%) between the two major technical workprogramme topics?

What percentage of overall effort should we apply to "technology transfer"?

How many consulting days do you think you will need next year and on what topics? (Reviews of projects, training, design help, joint working).

What fee level do you think is appropriate for 1996?

Do you have any views on the differing rates for different sponsor classes?

How do you think we can encourage visitors and secondees again?

HP feel that the fee structure now inhibits secondees. Suggestions to arrange more favourable terms do not make much impression.

DELIVERABLES

What requirements might you have on the format of the deliverables:

- design methodology applied
- documentation tools used (FrameMaker, Word)
- document formats supported (postscript, html, MIF, RTF, text)
- programming languages used (C, C++, ADA)
- software control and build environment?
- platforms, operating systems

What code would you require from each of the workpackages

- examples
- prototypes
- integrated release

To what quality level should code adhere?

What documentation levels are expected?

What can be done to improve the review process for deliverables?

INTERFACE

We plan to identify one APM/ANSA person to be your “mole” in APM. Any preferences on who?

We would like to plan and document the interface better. As part of that we would like to agree an action plan at least once every six months.

Who in your company could be identified as the main interface to coordinate such an action plan?

Are there any workshops that you would you like us to arrange?

OPERATIONS

Anything we can do to improve our administration, invoicing etc.?

Does the counting of consultancy days satisfy you?

What is your opinion on the TC and MC meetings?

BUSINESS CASE

How do we develop a list of the benefits you get from the ANSA Workprogramme for your company?

Can we complete the list and prioritise the items today? If not, what process can we set up to achieve a prioritised list?

What are the five key benefits that you get from us?

HP did not disagree with the comment that “ANSA had run its course”.

They are interested in Object Lab and would be willing to work on private projects with APM, whom they still like as a company.

0.0.1 Feedback from Joe Sventek; notes taken by ajh during phone call:

0.0.1.1 JSS diagnosis of HP lack of interest in ANSA - 24/10/95

- *Return for investment*
- *Scarce funds - contributing to ANSA further down list*
- *What has transferred?*
 - *some with secondees*
 - *we are phasing them out, therefore the channel is dead*
- *ANSA agenda is amalgam of many sponsors*
 - *doesn't fit focused needs of HP divisions*
- *QOS stuff limited power at HP*
- *Multi-media not central to HP real-time interests*
- *Shared code base not happen*
- *OMG/OSF alignment*
 - *broader requirements*
 - *synergy for one sponsor less likely*
- *Joe asked his manager, she said “Can't do that”.*
 - *Consortium is too diffues*
 - *The channel secondees now deprecated*

Tinkering response

HP - quality of service and guarantee it through the stack, want the infrastructrue - has to do

HP - Web tools, declarative interfaces and tools to support distributed applications - Bristol Web stuff

Manager's OK, why is important today ANSA should be doing next question

- *Electronic Enterprise*
 - *dictated by standards*
 - *security*
- *Data/CSCW/Workflow*
- *Info integrity 2PL++*
- *Lot of unfinished business from JPW, replications/transactions*
 - *Lets see something work*
 - *JAB security*

Critical mindset now behind CORBA (OL)

- *Need*
 - *“Higher transparency tools” - 24x7*
 - *High availability 24x7 infrastructure and tools)*

- *Virtual Corp*
 - *MCC did castle's in the sky*
 - *EI Corp on West Coast*
 - *What can we reap today?*
 - *Alignment Resonant*
 - *Discontinuities Insurance)*
 - *Safety/Integrity of the business process*
- Process Info Integrity*
- Mobility*
- *Safety Untravel)*

1 ICL

The first meeting with Ian Cordon and Graham Hook was preparatory. It was mainly to do with agreeing that the budget holder in ICL will become Ian Cordon (DAIS) rather than Graham Hook (who took the budget from Enterprise Technology to Enterprise Government in ICL). Other possible places are CJP's strategic group or BOR's research group. Ian Cordon agreed to take ANSA sponsorship on. This will mean ANSA is close to the DAIS business / product group in West Gorton. It means improving the immediacy of the results of the programme and the speed at which we produce outputs.

A second meeting was planned at which the detail of the questions below are to be answered.

MAIN TECHNICAL CHALLENGES

What are the six most important technical issues to your company in the field of distributed systems and with a product horizon of three to five (or maybe more) years from now?

What is the single additional thing that you wish ANSA would address in addition to the existing workprogramme?

WORKPROGRAMME

How do you think the effort should be split (in%) between the two major technical workprogramme topics?

What percentage of overall effort should we apply to "technology transfer"?

How many consulting days do you think you will need next year and on what topics? (Reviews of projects, training, design help, joint working).

What fee level do you think is appropriate for 1996?

Do you have any views on the differing rates for different sponsor classes?

How do you think we can encourage visitors and secondees again?

DELIVERABLES

What requirements might you have on the format of the deliverables:

- design methodology applied
- documentation tools used (FrameMaker, Word)
- document formats supported (postscript, html, MIF, RTF, text)
- programming languages used (C, C++, ADA)
- software control and build environment?
- platforms, operating systems

What code would you require from each of the workpackages

- examples
- prototypes
- integrated release

To what quality level should code adhere?

What documentation levels are expected?

What can be done to improve the review process for deliverables?

INTERFACE

We plan to identify one APM/ANSA person to be your “mole” in APM. Any preferences on who?

We would like to plan and document the interface better. As part of that we would like to agree an action plan at least once every six months.

Who in your company could be identified as the main interface to coordinate such an action plan?

Are there any workshops that you would you like us to arrange?

We agreed three workshops were needed in the short term:

1. *Architecture workshop at West Gorton*
2. *Strategic review*
3. *Regular updates / roadshow displaying progress and deliverables at ICL*

OPERATIONS

Anything we can do to improve our administration, invoicing etc.?

Does the counting of consultancy days satisfy you?

What is your opinion on the TC and MC meetings?

BUSINESS CASE

How do we develop a list of the benefits you get from the ANSA Workprogramme for your company?

Can we complete the list and prioritise the items today? If not, what process can we set up to achieve a prioritised list?

What are the five key benefits that you get from us?

1 Telefonica I&D

Overall this was a constructive and frank exchange of views.

Telefonica I&D are entering a phase in which they have to "market" the idea of using a DPE for telecommunications systems to their operating divisions. To help them do this they need good quality prototypes in the DIMMA area. In particular they have a target of building two complete services using a DPE. Complete means with billing, configuration management, fault management and so on. They were complimentary regarding the MatchMaker code which they used in a demonstrator for telecom '95. More of this type of results are needed to keep their interest.

It was recognised that both parties need to work at the interface to ensure that Telefonica derive maximum benefit from the ANSA programme.

MAIN TECHNICAL CHALLENGES

What are the six most important technical issues to your company in the field of distributed systems and with a product horizon of three to five (or maybe more) years from now?

What is the single additional thing that you wish ANSA would address in addition to the existing workprogramme?

The main issue for Telefonica is in the area of management federation. The group has been set a target to have several full telecommunications services supported by distributed processing by the end of 1997. This includes complete management of configuration and billing.

A full service is provided by several operating companies:

- *switches and their management forms the lowest layer. A DPE may be employed to distribute connection management, signalling and intelligent network functions*
- *value added services make use of basic services. They can themselves be distributed using a DPE*

Between these two layers connections are via agreed protocols from the B-ISDN family. It will be at least 4 years before the DPE is allowed to be extended to cover the interface between services in the two layers. The current approach is to use gateways to B-ISDN.

Second next important issue is Real Time and streams. B-tasks in the workplan appear to cover this well. However, we are asked to bring forward all COBRA work. A non-COBRA compliant DIMMA will be ignored.

Third issue is how to interface DPE/COBRA style systems to signalling protocols. This does not appear to be an area ANSA can cover due to the telecoms specific nature of this work. There is related work in the DCAN project however and this is of interest to telefonica.

WORKPROGRAMME

How do you think the effort should be split (in%) between the two major technical workprogramme topics?

B-series most important; effort split is about right, but note that C-tasks are of little interest as there is no follow-up of ANSA results at Telefonica I & D.

What percentage of overall effort should we apply to “technology transfer”?

Techn. xfer: effort about right

How many consulting days do you think you will need next year and on what topics? (Reviews of projects, training, design help, joint working).

See Interface

What fee level do you think is appropriate for 1996?

Fees: 1996 has been approved

Do you have any views on the differing rates for different sponsor classes?

I missed this question; I get the impression that the fees are about right, given we operate the interface better.

How do you think we can encourage visitors and secondees again?

See Interface

DELIVERABLES

What requirements might you have on the format of the deliverables:

- design methodology applied

neutral to design methodology

- documentation tools used (FrameMaker, Word)

Word & FrameMaker are in use

- document formats supported (postscript, html, MIF, RTF, text)

no problems with the format of deliverables

HTML format does not help as this still requires slow (for them) remote access.

See also Interface

- programming languages used (C, C++, ADA)

C++ is mostly used

- software control and build environment?

no constraints as their home-grown version control system requires manual input of any code received from us.

- platforms, operating systems

most forms of UNIX are used. SUN/Solaris 2.4, HP-UX9, AIX, OSFI/1-3, IRIX, Windows 95, No Windows/NT (for now)

What code would you require from each of the workpackages

- examples
- prototypes
- integrated release

To what quality level should code adhere?

What documentation levels are expected?

Software should be delivered so that its structure is reflected in the directory structure. Matchmaker was a good example. The documentation for MM was O.K. for use but is lacking for the current work on improving its performance. Integrated releases should have clear dividing lines between the parts. Components will be most interesting

What can be done to improve the review process for deliverables?

The review process requires more effort than can be made available. This is no fault of ANSA. We agreed that to plan the activities better would help both sides.

INTERFACE

The current interface is well organised but activity is somewhat low. More is expected in the next year.

In particular:

- *short overview documents are needed in addition to longer ones*
- *dissemination to a larger group in Telefonica is needed. Instead of TC it would be useful if we could give progress reports to Telefonica in workshops in Madrid.*

We plan to identify one APM/ANSA person to be your “mole” in APM. Any preferences on who?

No preference

We would like to plan and document the interface better. As part of that we would like to agree an action plan at least once every six months.

A documented plan for technology transfer is welcome. Juan Carlos will make a proposal based on their new plans and identify by opportunities for an ANSA delegation to brief them on DIMMA details.

Who in your company could be identified as the main interface to coordinate such an action plan?

Juan Carlos and Javier will remain MC & TC reps respectively.

Are there any workshops that you would you like us to arrange?

Workshops are not needed if (DIMMA) dissemination meetings happen at Telefonica.

Telefonica would like to receive a copy of our ANSA documents so they can be placed on their internal server. A tape, say once a month would be very welcome.

OPERATIONS

Anything we can do to improve our administration, invoicing etc.?

Juan Carlos indicated that monthly invoicing and payment were a bit tiresome. He checked with administrators regarding 3 month up front but this would cause more trouble than it was worth. We agreed to stick with the existing monthly arrangements.

Does the counting of consultancy days satisfy you?

Yes. The number of these needs to be increased next year to help DIMMA dissemination.

What is your opinion on the TC and MC meetings?

Two MC meetings a year and perhaps 2 TC would suffice if there was opportunity for the teams to be closer.

August and December are very bad months for these meetings.

BUSINESS CASE

How do we develop a list of the benefits you get from the ANSA Workprogramme for your company?

This was largely done in the meeting.

Can we complete the list and prioritise the items today? If not, what process can we set up to achieve a prioritised list?

What are the five key benefits that you get from us?

The 1996 budget has been approved. For 1997 however, more contribution from the ANSA programme is expected, specially in the DIMMA/DPE area. This will need to be COBRA compliant.

A strong contribution from ANSA, clearly helping the full service demonstrators planned for 1997 would be crucial.

OTHER ISSUES

Telefonica is very interested in the way in which DCAN plans to connect DPE management to switching/signalling protocols.

Telefonica has a strong interest in the OL specially the management and monitoring applications. This would need to take X/Open XIDM results into account.

ACTIONS

6. make DIMMA CORBA compliant
7. DIMMA dissemination meeting at Telefonica
8. investigate shadow document store at Telefonica
9. provide more info on OL
10. CMM to contact iabad @ tid.es.